

STATE OF ILLINOIS  
ILLINOIS COMMERCE COMMISSION

COMMONWEALTH EDISON COMPANY	:	
	:	
	:	10-0467
Proposed general increase in rates for delivery service.	:	

**ILLINOIS INDUSTRIAL ENERGY CONSUMERS**  
**DRAFT ORDER**

COME NOW the Illinois Industrial Energy Consumers (“IIEC”) and in response to the request of the Administrative Law Judges in this case, and provide the following Draft Order in this case:

**I. INTRODUCTION/STATEMENT OF CASE**

In response to the June31, 2010 filing by Commonwealth Edison Company (“ComEd”) for a general increase in electric delivery service rates. Abbott Laboratories, Inc., Corn Products International, Inc., Enbridge Energy, LLP, Exxon Mobil Power & Gas Supply Services, Inc., General Iron Industries, Merchandise Mart, Sterling Steel Company, LLC, and Thermal Chicago together with the University of Illinois filed petitions to intervene, which were granted by the Administrative Law Judges, and they participated in this case as the Illinois Industrial Energy Consumers (“IIEC”). IIEC addressed a limited set of issues and offered the testimony of Michael Gorman (IIEC Ex. 1.0; IIEC Ex. 4.0), Robert Stephens (IIEC Ex. 2.0-C-C; IIEC Ex. 5.0-C), and David Stowe (IIEC Ex. 3.0-C; IIEC Ex. 6.0), relating to post-test year *pro forma* adjustments to ComEd’s test year rate base, appropriate return on common equity, ComEd’s cost of service study/studies and primary/secondary split analysis, use of the Coincident Peak allocator for allocation of primary lines and substations, allocation and collection of the Illinois electric Distribution Tax, voltage differentiated rates and ComEd’s distribution loss factors

**IV. RATE BASE**

**C. Potentially Contested Issues**

**1. Post-Test Year Adjustments**

**b. Accumulated Provisions for Depreciation and Amortization**

**IIEC’s Position**

IIEC notes that ComEd initially proposed to increase its 2009 test year rate base by more than \$1 billion (almost 15% of the proposed rate base), mainly to capture forecasted post-test year plant additions during the 18-month period following the end of its declared test year. IIEC argues that ComEd’s proposed adjustment ignores the decreases to rate base that are certain to occur over the period of its plant additions.

IIEC witness Michael Gorman testified that under Section 287.40, post-test year increases to plant investment, attributable to additions to plant in service are not separate or severable from the post-test year decreases in plant investment attributable to the utility's recovery of past investment through depreciation expense, recorded as accumulated depreciation. In IIEC's opinion, the effect of ComEd's one-sided adjustment is to overstate ComEd's historical test year rate base, which in turn will overstate its cost of capital, and the operating results of the test year. Mr. Gorman proposed a corrective adjustment of more than \$582.7 million to recognize what he views as contemporaneous post-test year decreases in rate base attributable to the continuing decline in the value of test year plant.

Citing the Commission's most recent decisions on post-test year adjustments, and the consistent holding of the Illinois Appellate Court, IIEC proposes that the Commission correct ComEd's post-test year plant additions adjustment to recognize the build-up of the Accumulated Depreciation Reserve and Accumulated Deferred Income Taxes (ADIT) over the period of any approved plant additions.

IIEC observes that the Commission Staff and intervenor AG-CUB propose adjustments that are conceptually consistent with Mr. Gorman's corrective adjustment. IIEC states that the non-utility experts in this case are unanimous in their rejection of ComEd's unbalanced proposal. IIEC concludes from this that the differences in the expert's investigations of ComEd's proposed post-test year investments was the reason they reached varying conclusions respecting the appropriate period of the adjustments and the required correction. They do note, however, that their corrective recommendations uniformly assert that both post-test year increases to rate base and post-test year decreases to rate base must be measured, and that they must be measured as of a common date.

IIEC states that any proposed modifications of ComEd's 2009 historical test year data would be governed by Section 287.40, which provides:

A utility may propose pro forma adjustments (estimated or calculated adjustments made in the same context and format in which the affected information was provided) to the selected historical test year for all known and measurable changes in the operating results of the test year. These adjustments shall reflect changes affecting the ratepayers in plant investment, operating revenues, expenses, and cost of capital where such changes occurred during the selected historical test year or are reasonably certain to occur subsequent to the historical test year within 12 months after the filing date of the tariffs and where the amounts of the changes are determinable. Attrition or inflation factors shall not be substituted for a specific study of individual capital, revenue, and expense components. Any proposed known and measurable adjustment to the test year shall be individually identified and supported in the direct testimony of the utility. Each adjustment shall be submitted according to the standard information requirement schedules prescribed in 83 Ill. Adm. Code 285. (83 Ill. Adm. Code 287.40).

Citing the above administrative rule, IIEC argues that the Commission's most recent decisions on this issue, and a binding appellate court decision, are all contrary to ComEd's position. IIEC observes that ComEd continues to propose to utilize only post-test year increases to rate base for new plant additions, while ignoring contemporaneous decreases to rate base attributable to the continuing depreciation of test year plant in service. It states ComEd is arguing for continued acceptance of an interpretation of Section 287.40 that has been rejected as unlawful both in Commission decisions and in a determinative decision of the Illinois Appellate Court. IIEC argues that if any post-test year plant additions are recognized, the Commission should, as a matter of law, also recognize decreases to ComEd's rate base over the same period in determining the rate base used to set rates in this case.

IIEC goes on to analyze past Commission decisions, stating that earlier post-test year adjustments that were substantively identical to ComEd's proposal in this case have been expressly rejected by the Commission as impermissible under its post-test year adjustment rule, Section 287.40 (citing Final Order of April 29, 2010 in the Docket No. 09-0306, et. al. (cons.), that the adjustments in that case were modeled on ComEd's adjustment in its 2007 rate case (Docket No. 07-0566), which was an earlier version of ComEd's proposal here.

IIEC concluded that the Commission's own review of its even earlier interpretations and applications of Section 287.40 added further support to its conclusions, and that those past Commission decisions demonstrate the balanced adjustment it proposes is both unexceptional and appropriate. Citing the Commission's recent Docket No. 09-0306, et. al. (cons.) decision, IIEC suggests that the requirement for balanced adjustments was accepted as routine. (Docket No. 09-0306, et al., (cons.), Rehearing Order at 27). IIEC argues further that balanced applications of Section 287.40 were a continuation of what was common practice under Section 287.40's predecessor rule, which had language nearly identical to that of Section 287.40, with the Commission's acceptance of contrary proposals a small number of cases was a historical anomaly. IIEC then analyzes the recent Appellate Court decision that reviewed the same issues addressed by the Commission in the Docket No. 09-0306, et al. (cons.) (*Commonwealth Edison Company v. Illinois Commerce Commission*, 937 N.E. 2d 685). The Appellate Court reached conclusions identical to those of the Commission. The Appellate Court's decision was entered and became effective on September 30, 2010. (*PSL Realty Co. v. Granite Investment Co.*, 86 Ill. 2d 291, 304-305 (1981) ("That judgment was final when entered and not on the date that the mandate of the appellate court issued. . . . The date of the issuance of the mandate does not control the effective date of the appellate court judgment.")). IIEC observes that ComEd's only explanation for its persistence in an approach it knows to be unlawful was simply that the utility intended to seek leave to appeal the decision to the state supreme court. IIEC concludes that consistency with the PUA, the Commission's rules, and test year principles require the corrective adjustment it proposes, because a calculation of rate base value that includes investment already returned through depreciation expense would exceed the express limitation on Commission authority imposed by PUA section 9-211.

IIEC asserts that ComEd's testimony implicitly asks the Commission to distort its test year rules and principles to protect ComEd from its decision to use a historical test year in this case, stating that ComEd knowingly invoked the Commission's historical test year rules and its limits on post-test year adjustments. ComEd obviously knew of its future investment plans and

of any trend of increasing investment that would not be captured in its chosen historical test year. IIEC concludes from their observation that a future test year could have avoided the asserted need for post-test year adjustments and that, having elected a historical test year, ComEd has not offered a reason why the rules associated with its chosen litigation strategy should not apply. It is IIEC's view that the Commission cannot bend the applicable test year rules to shield ComEd from the effects of its test year election.

IIEC contends that ComEd's witnesses attempt to substitute other questions for the issue of whether ComEd's proposed adjustment unlawfully inflates its test year rate base. It notes that Company witness Mr. Guerra suggests that opposition to a portion of ComEd's plant additions adjustment is tantamount to "pretending that ComEd will invest not a dime in its system through next June." (Guerra, ComEd Ex. 25.0 at 3-4:64-66). However, IIEC asserts that no party made any such claim. IIEC also observes that Company witness Mr. Fetter implies that ComEd's proposed post-test year plant additions adjustment must be accepted to maintain credit analysts' positive assessment of ComEd's regulatory treatment. IIEC witness Mr. Gorman pointed out that for any post-test year adjustments, most other jurisdictions reflect changes in gross plant in-service and the accumulated depreciation reserve over the same post-test year period. IIEC states that in two jurisdictions that match contemporaneous rate base increases and decreases - - Missouri and Iowa the Standard & Poor's and RRA's regulatory assessments are stronger than Illinois' assessment, concluding that ComEd's one-sided adjustment is not necessary to maintain strong regulatory rankings.

IIEC notes that ComEd's principal defense of its Section 287.40 adjustment for post-test year changes in rate base consists of a series of comparisons between various historical test year results and a ComEd calculation of hypothetical results derived using future test year concepts that IIEC maintains are not available under that rule. It recalls that Company witness Ms. Houtsma's response to the inquiry: "Couldn't ComEd have avoided this [future investment not reflected in rates] problem by filing a rate case using a future test year instead of an historical test year?" (Houtsma, ComEd Ex. 6.0 Rev. at 12:240-244). However, IIEC observes that Ms. Houtsma never answers the question. Instead she opines that a future test year might not yield lower rates than ComEd is requesting here. She then extends her comparisons to juxtapose ComEd's historical test year revenue requirement with a hypothetical future test year revenue requirement. IIEC argues that even if rate base were the only factor affecting revenue requirement Ms. Houtsma's comparison still would not be relevant to a determination of the lawfulness or reasonableness of ComEd's historical test year rate base adjustments, because the appropriate standard for that determination is established by the requirements of Section 287.40 and PUA section 9-211, not an amount derived using future test year concepts like budget-based investment forecasts.

IIEC then analyzes ComEd's comparison of achieved returns. IIEC notes that ComEd argues that rates, and therefore rate base, were not overstated in ComEd's *last* rate case (where ComEd did not recognize post-test year rate base decreases), because its actual earned-return on equity lagged the ROE authorized by the Commission. ComEd then concludes that its evaluation of earnings after ComEd's last rate case refutes any contention that a failure to update the depreciation reserve would result in overstated rates. IIEC responds that there is no logic in

ComEd's assertion, and that rate base is only one of many variables that affect ComEd's earnings and thus the utility's earned return on equity.

As to ComEd's evidence respecting ComEd's rate base, Ms Houtsma offers (a) another comparison of historical test year results to data derived using future test year concepts and (b) an unsupported prediction that rate base will not be overstated because ComEd will continue to make significant capital investments during the period in which the rates set in this proceeding will be in effect in amounts that will exceed the continued accrual of depreciation. IIEC argues, however, that ComEd's election of a historical test year requires the application of Section 287.40, which precludes future test year type forecasts and makes comparisons to such estimates inapposite.

IIEC also argues that ComEd's comparisons are conceptually the same as one the Commission recently considered and found unpersuasive – in its Docket No. 09-0306, et al. (cons.) decision, Docket 09-0306, et al. (cons). IIEC contends that ComEd's comparisons, like that in Ameren's recent rate case, are affected by the inclusion of investment amounts that do not meet, *inter alia*, the "known and measurable" criteria of Section 287.40, stating that such comparisons do not assist the Commission in evaluating the reasonableness of any proposed adjustment. IIEC witness Gorman confirmed the flaws in Ms. Houtsma's logic by examining her comparisons exhibit. He found that the exhibit actually supports conclusions contrary to Ms. Houtsma's arguments and positions.

IIEC states that the Commission's test year rules provide the means for utilities anticipating significant new investment to achieve a rate base representative of a future period – a future test year filing. It contends that ComEd's choice of a historical test year defined the extent to which the Commission is able to recognize future (post-test year) rate base investment and that the Commission cannot lawfully ignore its rules to shield ComEd from the effects of its test year choice.

## COMMISSION ANALYSIS AND CONCLUSION

ComEd proposes a post-test year adjustment under Section 287.40 of the Commission's rules for post-test year plant additions. ComEd's adjustment does not recognize contemporaneous, off-setting reductions to plant in service attributable to increases in accumulated depreciation.

The adjustment to test year rate base ComEd proposes here was recently the subject of intensive scrutiny by this Commission in Docket 09-0306, et. al. (cons.). In that earlier case, the Commission addressed the same legal issues that are determinative in this case. The Commission found (and affirmed on rehearing) that adjustments like ComEd's are unlawful under the Commission rule on post-test year adjustments, Section 287.40 and in conflict with section 9-211 of the Act. (83 Ill. Adm. Code 2878.40; 220 ILCS 5/9-211). The Commission's analysis and holdings were subsequently affirmed on judicial review by the Illinois Appellate Court of an identical adjustment in ComEd's last rate case. *Commonwealth Edison Company v. Ill. Comm. Comm'n*, 937 N.E. 2d 685 ("ComEd Appeal").

Though ComEd stated its intention to seek leave to appeal that decision to our state's Supreme Court and later did so, the utility's actions do not delay or diminish the effectiveness of the Appellate Court's decision, which became effective and binding on this Commission when it was entered on September 30, 2010. *PSL Realty Co. v. Granite Investment Co.*, 86 Ill. 2d 291, 304-305 (1981) ("That judgment was final when entered and not on the date that the mandate of the appellate court issued. . . . The date of the issuance of the mandate does not control the effective date of the appellate court judgment."); *Long v. City of New Boston*, 91 Ill. 2d 456, 462 (1982). ComEd has provided the Commission no legal basis on which it could deviate from its prior holding and the decision of the appellate court.

In any event, on the record evidence in this case, such a deviation to adopt ComEd's proposed adjustment (without recognizing contemporaneous, offsetting changes) would not be justified. ComEd's evidentiary support for its plant additions proposed adjustment is a series of comparisons of test year data (with its proposed adjustment) and corresponding data for a future period representing the period rates will be in place. However, as IIEC pointed out, ComEd's future period data were developed using future test year concepts (*e.g.*, budget based forecasts instead of known and measurable changes) that are incompatible with the historical test year the utility chose as the basis for its proposed rates. Future test year type data are not a suitable standard for assessing the appropriateness of historical test year results, even if they did not (as IIEC and Staff evidence showed) actually weigh against ComEd's claims. Relying on ComEd's evidence would require the Commission to use future test year concepts in a historical test year case, contrary to our test year rules. Such evidence does not permit the Commission to find that the resulting rates would be just and reasonable.

### **c. Accumulated Deferred Income Taxes (ADIT)**

#### **IIEC's Position**

IIEC asserts with respect to ADIT that logic and legal requirements compel consideration of both increases and decreases to Test Year plant investment which in turn also compel such balanced post-Test Year adjustments for other components of ComEd's rate base. IIEC contends (i) that as Gross Plant and Accumulated Depreciation are the two largest components of Net Plant, and (ii) ComEd's Net Plant and Accumulated Deferred Income Taxes (ADIT) are the two largest quantities in the Commission's calculation of rate base. Therefore, IIEC concludes that any post-Test Year rate base adjustments the Commission approves should take account of ADIT as well as Accumulated Depreciation.

IIEC witness Gorman recommends a \$632.4 million correction to ComEd's proposed adjustment for additions to rate base over a period of 18 months. This correction combines IIEC's recommended correction for post-test year changes in accumulated depreciation with its proposed correction to recognize post-test year changes in ADIT. The combined correction reduces ComEd's revenue requirement by \$70.9 million.

IIEC notes that the Commission recently examined whether *pro forma* adjustments for plant additions should be accompanied by an adjustment reflecting ADIT and the accumulated depreciation balance through the end of the adjustments period for plant existing at the end of the

test year in its recent Ameren Rate case, Docket No. 09-0306, et. al. (cons.). There, IIEC states, the Commission concluded that an adjustment for post-test year changes in ADIT, as well as accumulated depreciation, is both appropriate and required when post-test year plant additions are added to the test year rate base.

IIEC concludes, based on the Commission's decision and the ComEd Decision applying Section 9-211 of the Act that the Commission must approve IIEC's proposal for a corrective adjustment to recognize post-test year changes to this element of rate base.

## **COMMISSION ANALYSIS AND CONCLUSION**

ComEd relies on the arguments it offered to support its opposition to recognizing contemporaneous post-test year changes in the accumulated depreciation reserve as an offset to its proposed post-test year plant additions adjustment, to support its parallel refusal to recognize contemporaneous changes in accumulated deferred income tax ("ADIT"). The law and evidence that require the Commission to reject ComEd's position on the accumulated depreciation reserve issue are equally compelling respecting post-test year changes in ADIT.

In its Order on Rehearing in Docket No. 09-0306, et. al. (cons.), the Commission concluded after an exhaustive examination of post-test year adjustments that "an adjustment to the ADIT balance is essentially a companion or derivative adjustment to the accumulated depreciation." The Commission held that adjustments for post-test year changes in accumulated depreciation and ADIT were required where post-test year additions to plant were recognized. If the adjustments proposed by Staff, IIEC, and CUB-AG are not made, the mismatch of test year and post-test year rate base elements would be inconsistent with the Commission's test year rules, and the effect would be that customers pay rates based on a distorted rate base that are not just and reasonable. Accordingly, ComEd must recognize a test year rate base adjustment for post-test year changes in accumulated depreciation and ADIT that are contemporaneous with recognized plant additions. Those offsetting rate base adjustments amount to \$\_\_\_\_\_ [amount dependent on period of recognized plant additions].

## **VI. RATE OF RETURN**

### **E. Cost of Common Equity**

#### **IIEC's Position**

##### *1. The Parties' Analyses*

IIEC argues ComEd's proposed 11.5% return on equity ("ROE") is excessive. IIEC recommends an ROE of 9.6% as reasonable and appropriate under current financial market conditions and adequate to maintain ComEd's investment grade credit ratings. IIEC's says its recommendation is supported by the testimony of Michael Gorman. Mr. Gorman used three variations of the Discounted Cash Flow ("DCF") analysis and a Capital Asset Pricing Model ("CAPM") study to estimate the required market return for ComEd. In addition, Mr. Gorman presented a risk premium ("RP") study, but did not use its result in quantifying his estimate, because of previous Commission decisions rejecting the use of that approach. IIEC says Mr.

Gorman identified significant errors in ComEd's ROE-related analyses and showed that they result in an overstatement of the utility's market required return.

IIEC also argues that ComEd supports its recommended ROE with the testimony of several witnesses, a greater number of estimation approaches, and financial commentary from many of its other witnesses. Specifically, IIEC points to the following ComEd testimonies; Seligson, ComEd Ex. 12.0 Rev.(comparable earnings and risk premium estimates); Hadaway, ComEd Ex. 11.0 (DCF [three versions] and risk premium estimates); Fetter, ComEd Ex. 5.0 (credit ratings commentary, ); Trpik, ComEd Ex. 4.0 Rev.(access to capital); Tierney, ComEd Ex. 13.0 (ROE adder)). IIEC points out ComEd also proposes a 40 basis point adder to increase whatever market required return is determined by the Commission; ComEd included the effect of the adder in its recommended 11.5% ROE.

IIEC also notes Staff and AG/CUB experts presented their own estimates of ComEd's required return on equity. IIEC says that like Mr. Gorman, these experts used variations of DCF and CAPM analyses. Staff's expert Michael McNally presented two versions of the DCF model: constant growth and multi-stage growth studies. AG/CUB expert Christopher Thomas presented constant growth and multi-stage growth DCF models that used historical and projected internal growth rates.

The following table summarizes the parties' presentations.

WITNESS	OVERALL	DCF	CAPM	RP	COMP. EARNINGS	SOURCE
<b>Seligson (ComEd)</b>	12.0%	----	----	12.6%	11.4%	ComEd. Ex. 12.0 at 10:221-225
<b>Hadaway (ComEd)</b>	10.7% - 11.3% (incl. 40 BP adder)	10.3% - 10.9%	----	[10.24%]	----	ComEd Ex. 37.0 at 31-32:586-601
<b>McNally (Staff)</b>	10.0%	9.69%	10.32%	----	----	ICC Staff Ex. 5.0 at 21:422-426, 32:627-629, and 33:633-634
<b>Gorman (IIEC)</b>	9.6%	9.8%	9.4%	[9.72%]	----	IIEC Ex. 1.0 at 32:734-735 and 38:859-873
<b>Thomas (AG-CUB)</b>	8.94%	8.94%	6.69% - 9.05%	----	----	AG/CUB Ex. 4.0 at 29:592-595, 33:672-676, and 34:690-691

\*[Bracketed estimates were not used directly in determining recommendations]

IIEC first discussed the parties' DCF and CAPM Analyses. IIEC says that with the notable exception of ComEd witness Carl Seligson, the ROE experts in this case who estimated ComEd's market required return relied principally on the DCF or CAPM analyses. IIEC says these approaches have been approved by this Commission in its recent decisions. IIEC cites the Commission decisions in the Docket No. 09-0306, et. al. (cons.), Final Order, Apr 29, 2010 at 216 and *Re Commonwealth Edison Company*, Docket No. 07-0566, Order Sept. 10, 2008 at 98.



With respect to the Commission's preferred DCF and CAPM approaches, IIEC says the major sources of the differences in parties' recommended equity returns are (a) the growth rate input to parties' DCF analyses and (b) the estimate of market risk premium component of parties' CAPM analyses. In IIEC's view, ComEd's choices for these inputs have improperly inflated its requested return on equity. For the reasons discussed in greater detail in its briefs, IIEC says those inputs, and the resulting ComEd recommendation, should be rejected. Moreover, IIEC reasons that with an appropriate determination of the market required return, the further increase of ComEd's proposed 40-basis point adder is unnecessary and excessive. ComEd's proposed adder also should be rejected.

IIEC takes exception to ComEd's Comparable Earnings Estimate. IIEC says ComEd witnesses also presented (and used) the results of two additional approaches that the Commission has traditionally not considered -- Comparable Earnings and Risk Premium methodologies.

IIEC notes that only ComEd witness Mr. Seligson provided a comparable earnings analysis. IIEC says that consistent with the Commission's historical rejection of that approach, even ComEd did not use the resulting comparable earnings ROE estimate in quantifying the utility's requested return. IIEC opines that the record provides no reason for the Commission to reverse course to consider the excessive result in any case. In any case, IIEC states its witness, Mr. Gorman found that the "comparable" firms Mr. Seligson used have not been shown to have similar investment risks, types of operations, or accounting practices. Moreover, IIEC reasons earned returns (an accounting metric) are not a measure of the required return for ComEd (a dynamic market measure). ComEd has not provided any evidence that its belief that utilities have risk comparable to the overall market is shared by any market participant or has any validity.

IIEC contends that the only support Mr. Seligson supplied for the suggestion that the Commission should deviate from its consistent policy of rejecting the Comparable earnings approach is a survey of commissions conducted more than a decade ago, wherein only one-quarter of the one-half of commissions that responded used a comparable earnings approach, in some unspecified manner in their estimate of the cost of equity. Therefore IIEC concludes Mr. Seligson's recommended comparable earnings ROE should be discarded.

Next IIEC addressed the Risk Premium Analyses of ComEd witnesses Seligson and Hadaway, noting only Mr. Seligson used his RP result directly in determining his recommendation. IIEC says in prior cases cases, RP estimates have been rejected by the Commission in determining an appropriate ROE. (Docket No. 09-0306, et. al. (cons.), Final Order Apr. 29, 2010 at 216). IIEC says its witness Gorman detailed defects in those analyses that provide additional reasons those results should not be used. In particular, IIEC pointed out Dr. Hadaway's use of problematic forecasts of Treasury and utility bond yields to determine his equity risk premium and his additional upward adjustment (to effect an assumed relationship between equity risk premiums and interest rates), inflate his RP estimate to an unreasonable level.

IIEC says its witness Mr. Gorman tested Dr. Hadaway's risk premium estimate with a comparison of yield forecasts, current yields, and actual yields for the forecasted period and

showed that forecasted yields almost always overstated the yield that ultimately occurred. IIEC says the projections used by Dr. Hadaway are highly problematic, and that his risk premium estimate should be ignored.

IIEC says that Dr. Hadaway has also assumed a simplistic inverse relationship between equity risk premiums and interest rates, and adjusted his RP estimate of a fair equity risk premium in the current marketplace to reflect that assumption. However, IIEC suggests the actual relationship between those variables is more complicated, changes over time, and is influenced by factors other than nominal interest rates. The foundational assumption of Dr. Hadaway's adjustment is not supported by relevant academic research.

IIEC says that substituting current actual yields for inaccurate adjusted forecasted yields in Dr. Hadaway's estimation equation significantly reduces his ROE estimate to a level near that of Mr. Gorman's recommendation.

IIEC also criticizes ComEd's other RP analysis. IIEC says ComEd witness Mr. Seligson's quantification of ComEd's estimated ROE is at least as flawed as Dr. Hadaway's analysis. Specifically IIEC says Mr. Seligson:

- used a market risk premium more appropriate for the market as a whole, not for a below-market risk distribution utility;
- selected the highest market premium in Morningstar's range of published estimates (5.2% - 6.7%), without explanation or justification; and
- used one of the highest available estimates of Treasury bond yields, selecting 2011 estimates, when a consensus estimate for even the next two years (4.7%) was considerably lower than his 5.9% yield.  
(Gorman, IIEC Ex. 1.0 at 59-60:1281-1314).

To provide the Commission with market information from a risk premium analytical perspective, IIEC says its witness Mr. Gorman also presented RP analyses and although Mr. Gorman's analyses avoid the errors he identified in ComEd's RP analyses, IIEC says Mr. Gorman did not use his RP results directly in his estimation of ComEd's ROE. However, according to IIEC, Mr. Gorman's analysis demonstrates the unreasonableness of the RP analyses presented by ComEd's witnesses.

## *2. ComEd's Commentary Testimony*

IIEC notes the commentary on financial and regulatory environments from ComEd witnesses appropriately played no direct role in ComEd's quantification of its market required return. According to IIEC, their opinions on the current state of the financial markets and Illinois regulation do not warrant any modification of ROE estimates determined through the analysis of actual market data.

IIEC explained that conclusions respecting the need for supportive regulation in Illinois (a) are based on risks not faced by ComEd's distribution operations and (b) attempts to compensate ComEd for risks that the utility can manage or eliminate using available regulatory mechanisms. In IIEC's view, ComEd's assessment of Illinois dwells on past legislative issues that are now irrelevant, overlooks the market's improved view of Illinois regulation and ignores regulatory options available to ComEd to manage recovery of its costs of service. Ultimately, IIEC says the objective of ComEd witnesses appears to be replicating other Commission awards and pleasing analysts, rather than determining what the market requires for ComEd.

IIEC says its witness Mr. Gorman testified, on the basis of his own assessment of current conditions, that Illinois regulation provides adequate support to ComEd's access to capital. He supported his assessment by noting, *inter alia*, ComEd's "Excellent" S&P credit rating business profile score and its favorable senior secured bonds ratings from S&P and Moody's.

### 3. *DCF Model Issues – Growth Rates*

IIEC says the most significant differences among the DCF analyses and recommended returns in this record can be explained by the various expected growth rates used as DCF model inputs. IIEC identifies two questions respecting those inputs as the most important. The first question is whether short-term growth rate estimates can produce a reasonable constant growth DCF study. To obtain reasonable results from such growth inputs, the three-to five-year earnings growth rate outlooks published by analysts must be reasonable estimates of long-term sustainable growth. To be suitable DCF constant growth inputs, the three-to five-year growth rates cannot exceed the growth rate outlook for the economy in which ComEd must operate over the infinite period used in the DCF model. IIEC argues the Commission has approved the same reasoning in other cases. IIEC cites *Commonwealth Edison Company*, Docket No. 07-0566, Final Order, Sept. 10, 2008 at 97 and Docket No. 09-0306, et. al. (cons.), Final Order, Apr 29, 2010 at 219.

IIEC says that Mr. Gorman and Staff witness Mr. McNally agreed that current three-to five-year growth rates do exceed the expected growth rate of the economy and, therefore, are not reasonable estimates of long-term sustainable growth. Consequently, the constant growth DCF models in this case that use current analysts' projections produce return estimates that are too high. IIEC witness Mr. Gorman acknowledged that flaw in his constant analysts' growth rate DCF model. Staff witness McNally reached the same conclusion with respect to his results from using three- to five-year growth rate projections made by analysts for his sample group. IIEC reasons ComEd witness Dr Hadaway, on the other hand, did not discount his constant growth DCF estimate and embraced that result, even though he used analysts' current, inflated three-to five-year growth rates; but acknowledged that empirical data "support the notion that long-term growth expectations are more closely predicted by broader measures of economic growth than by near-term analysts' estimates."

IIEC states that since there is no reasonable dispute that analysts' short term growth projections are not expected to persist indefinitely, each testifying expert relied to some extent on the rate of growth in the national Gross Domestic Product (GDP) as a surrogate for long term earnings growth. The GDP growth rate used in a constant growth DCF model or as a surrogate for long term growth in a multi-stage DCF model is particularly important according to IIEC.

An infinite period of overstated growth has an obvious effect on the resulting estimate. The multi-stage version of the DCF formula recognizes that near term growth rates and transitional growth rates will prevail only for finite, brief periods. However, over the final, infinite period of sustainable growth the DCF model contemplates, the long term growth rate input has the greatest impact on the resulting DCF estimate. In IIEC's view, even small differences in growth rate, applied over an infinite period as required by the DCF formula, can significantly affect ROE estimates.

IIEC says such differences appear in the analyses of the experts in this case. IIEC explained this difference in a table presented in its initial brief. IIEC posits that the relative magnitude of the ROE recommendations of record closely tracks the relative magnitude of the long term growth rate inputs used in the related constant growth and multi-stage, non-constant growth DCF models.

Multi-stage growth DCF analyses were performed by experts for IIEC, Staff, and ComEd. AG/CUB Christopher Thomas used a GDP growth rate of 4.86%. IIEC's Mr. Gorman used a long-term growth rate of the economy of 4.7%. Staff used a long-term growth rate for the economy of 5%. Both IIEC's and Staff's GDP growth outlooks were based on published growth rates available to investors. In contrast, IIEC says ComEd's Dr. Hadaway relied on a GDP growth rate of 6.0%. IIEC notes that growth projection was based on his assessment of historical achieved GDP growth and is unlikely to have affected investors' expectations. IIEC observes ComEd witness Dr. Hadaway's historical GDP estimate was derived specifically for this litigation, is not generally available to investors, and uses a methodology not reviewed by the financial community. IIEC says the Commission should not rest its determination of just and reasonable rates on such parochial inputs.

IIEC says for his sustainable growth rate model Dr. Hadaway set aside analysts growth rates only to select an excessive GDP growth rate estimate, based on his massaging of historical data, that is even higher. In IIEC's opinion, that assessment subjectively weights certain years within the historical period differently. In addition, IIEC says Dr. Hadaway's opinion that GDP growth will return to past levels ignores fundamental changes in national and world economic trends. Further, according to IIEC, as between analysts' estimates of future GDP growth and an average of historical GDP growth rates, Dr. Hadaway chose the higher historical input.

IIEC believes that had Dr. Hadaway used growth rates reflecting published analysts' growth rate outlooks in his multi-stage growth DCF model, those growth rates and the resulting DCF return estimates would have been substantially lower and presented a revision of Dr. Hadaway's DCF estimates using reasonable GDP growth forecasts. In IIEC's opinion, the selection of excessive short term growth projections as long term growth inputs to Dr Hadways models accounts for the excessive estimates from his DCF analyses. Further, IIEC says that when using GDP growth as a surrogate for sustainable long term growth, Dr. Hadaway's selection of a GDP growth rate even higher than the short term analysts' growth projections that other experts rejected predictably yields an excessive result.

#### 4. *CAPM Analysis Issues -- Market Risk Premium*

IIEC finds one aspect of Staff's CAPM ROE estimate troubling. Staff estimated a DCF return on the S&P 500 stocks of 12.74%. Staff did not show the computation of the risk premium estimate used in ICC Staff Exhibit 5.10, but because it was based on a market return of 12.74%, it is IIEC's position that the estimate is at best problematic. Staff's DCF return on the market implies a growth rate of over 10% -- nearly twice the level of growth Staff estimated with its GDP growth rate of 5%. IIEC says Staff simply has not provided any support for the reasonableness of its S&P 500 growth rate estimate of 12.74%.

IIEC says its witness Mr. Gorman presented an alternative approach that did not share this deficiency of Staff's risk premium derivation, but has the reliability of an estimate based on actual market results. However, IIEC concedes that there is some inaccuracy in any estimate of the equity market risk premium. For that reason, Mr. Gorman's analysis recognized that an estimated range of the market risk premium, used in conjunction with other more specific estimates, is a superior approach.

### **COMMISSION ANALYSIS AND CONCLUSION**

In this case, the Commission is presented with an unusually broad array of ROE estimation methodologies (DCF, CAPM, Risk Premium, and Comparable Earnings), ROE estimates (a range of 6.69% to 12.6%), market estimate modifications (three distinct adders or reducers) and recommended returns (a range of 8.94% to 12.0%). ComEd alone has presented testimony from four or more witnesses who comment on various aspects of the utility's return on equity recommendation. In such circumstances, serious analysis of the estimates and recommendations on which the Commission will rely requires early identification of those that do not meet the standards established by the Commission.

The authors of the ROE analyses yielding the highest and the lowest recommendations in the used methodologies that the Commission has not favored in the past -- Comparable Earnings and Risk Premium analyses. At the high end is the Comparable Earnings estimate of ComEd witness Seligson. The Commission has regularly rejected Comparable Earnings analyses for more than a decade.<sup>1</sup> We do not find Seligson's conclusory statements about the methodology, or his exhibit presenting the book returns of an undefined collection of utilities, sufficient reason to change course in this case. The lowest estimate is a CAPM estimates from CUB-AG witness Thomas. In recent cases, the Commission has had an opportunity to consider the use of internal growth rates in DCF analyses. The Commission has found the methodology still novel and inconsistent with methodologies accepted by this and other Commissions. We decline to use

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<sup>1</sup> See Oct 22, 2003 Order, Docket No. 02-0798 at 88 ("the Commission does not believe it is appropriate to estimate CIPS' and UE's forward looking cost of common equity by looking to historical earned returns on common equity . . . ."); Nov 21, 2006 Order, Docket Nos. 06-0070-0072 (Cons.) At 141-2 concluding that the methodology "incorrectly assumes that earned returns on book common equity are the same as, or representative of, investor-required returns on common equity").

either of these estimates here. Thus, the highest and lowest estimates ROE estimate will not be considered further.

The Commission has also declined to rely on RP estimates in its April 29, 2010 Order, Docket No. 09-0306, et. al. (cons.) at 216. The Commission rejected the risk premium analysis. For that and other reasons summarized below, these estimates also will not be examined further or used in our analysis. Seligson's RP result was combined with his Comparable Earnings estimate to produce his recommendation. Thus, his recommendation lacks any basis on a methodology accepted by this Commission and will be excluded from our determination. ComEd witness Hadaway also used a RP analysis, his lowest estimate, but as that position was shared with a Hadaway DCF estimate, the exclusion of his RP estimate does not affect Hadaway's range of estimates. IIEC witness Gorman presented a RP analysis that was not used in determining his ROE recommendations. The remaining estimates are based on the DCF and CAPM analyses the Commission traditionally relies upon.

On this record, which details an economic environment affected by recent financial turmoil, all the experts conducting DCF analyses recognized the limitations of a constant growth assumption for the model. Each expert supplemented the constant growth model used in more stable times with multi-stage DCF models more attuned to less stable market environments. In multi-stage DCF analyses, the growth rate for the final period is key. Because the long-term growth rate in a DCF model persists for an infinite period, that input can have a decisive impact on the resulting ROE estimate. That DCF input must be sustainable over the long term. The experts all agree that current short-term analysts' growth rates may not reflect this long-term growth outlook. In the past, this Commission has endorsed the use of projected long-term GDP growth as a reasonable proxy for the upper bound of long-term utility growth.

In reviewing the DCF estimates of ComEd, Staff, and IIEC, it is clear that the defining differences among them relate to their growth rate inputs. The growth rate divide in this case finds Hadaway on one side and every other ROE expert on the other. (IIEC Br. at 29, Chart). Hadaway uses a 6.0% GDP growth rate, while the other experts used GDP growth rates clustered within 15 basis points of 4.85%. Hadaway relies on growth rates he developed for this case, rather than long-term projections drawn from market sources like analysts' published long-term GDP growth rates, which are the basis for many market participants' expectations. Those published estimates indicate that GDP growth rates will be much lower than the GDP growth rate Hadaway used. As the trier of fact we are also cautious about accepting outlier inputs that have been developed specifically for litigation, as are our courts when confronted with such evidence. The weight of the evidence is that the growth rates used by Staff and IIEC are reasonable, in the mainstream, and used by investors; Hadaway's are not. Accordingly, the Commission will consider the estimates produced by the DCF models with growth rate inputs shown to be reasonable by the record evidence -- those of Staff and IIEC.

The CAPM analyses of Staff and IIEC are generally unremarkable. Despite the Commission's past reliance on this methodology, no other party provided this ROE estimation analysis. Though the variance between Staff's DCF and CAPM estimates deprives the Staff recommendation of the added credibility that comes from mutually confirming estimates, we do

not find it disqualifying. The Commission accepts both Staff's and IIEC's CAPM estimates for consideration.

Because the DCF and CAPM analyses and estimates of Staff and IIEC meet the Commission's traditional standards, we will use those parties' recommended return levels as the final inputs to our determination. We find that on this record, a reasonable return is in range defined by those IIEC and Staff recommendations – 9.6% to 10.0%. For reasons already discussed, the other ROE recommendations are not reliable and will not be used in our determination. Though superior to the other recommendations in this record, we must assess the relative strengths of these remaining two.

We have sometimes preferred analyses using a single day's data (like Staff's) over others using selected historical data periods (like IIEC's). However, it appears in retrospect – that there is some indication that the data used by Staff may reflect a short-lived market condition. (*see* ComEd Br. at 96-97) and its developed market risk premium incorporated a high market return (*see* IIEC Br. at 31). In these circumstances, IIEC's period based estimate, which avoids some of the issues identified in Staff's estimate, merits increased weight. This Commission's reasoning in the similar circumstances of an earlier case is instructive.

We note that the Commission has traditionally relied upon a single day's data in applying the DCF analysis, and we are very reluctant to deviate from Commission ratemaking practice. However, the whole point of conducting such analyses is to develop a proxy for the appropriate ROE. When it can be shown that the proxy itself strays from a zone of reasonableness to the degree where it offers an unreliable estimate of the appropriate ROE, as the Utilities have demonstrated with Staff's DCF analysis in this case, deviation from accepted practice may be warranted. (Feb 5, 2008 Order, Docket No. 07-0241 at 92).

While we do not view the result of Staff's analysis as unreliable, we do find that it should not be the only basis of our determination. In addition, as IIEC's analysis avoids the identified difficulties of Staff's, we will give it equal weight. The result of that averaging of Staff's and IIEC's return on equity recommendations is 9.8%, which we find to be reasonable under the market conditions described in the record and reflected in these estimates.

## **F. Adjustments to Rate of Return**

### **IIEC's Position**

ComEd has proposed to augment its already over-stated ROE recommendation with a 40 basis point ("BP") adder. The adder would apply to whatever ROE the Commission approves. According to ComEd the adder is necessary "to mitigate the adverse effects on ComEd's revenues that would occur as a result of the combined effects of 'business as usual' ratemaking practices, full compliance with the State's energy efficiency program goals, and the impacts of other demand-side measures on customer loads." IIEC recommends that the Commission reject ComEd's proposed 40 BP adder to the approved ROE.

IIEC explains that the adder is unnecessary, penalizes customers, and reduces the regulatory efficiency. The adder is not needed for ComEd to manage the risks the utility identifies as justification. IIEC says the principal risk identified by ComEd is that energy efficiency and demand response (EE/DR) programs will reduce sales. However, IIEC argues ComEd has adequate means to respond to that risk. IIEC notes ComEd witness Ms. Tierney acknowledges that ComEd can use a future test year to set rates, but suggests that there are risks that a future test year will not eliminate. However, IIEC points out the risks Ms. Tierney identifies are elements of rate setting that have been addressed in the past without ROE adders. IIEC says that simply observing that the Commission's rate setting process has not eliminated every risk of ComEd's operations is not a valid compliant, nor does it satisfy ComEd's burden of proving that a 40 BP adjustment is just and reasonable. IIEC says the test year approach would allow ComEd to incorporate forecasted sales levels and costs of service that take account of its anticipated EE/DR activities. IIEC also reasons a future test year would better align its cost of service with future forecasted billing units. Thus, IIEC concludes ComEd's opportunity to earn its cost of capital is not subject to an unavoidable risk for which it should be compensated. However, rather than address such risk management, IIEC says ComEd's apparent position is that ComEd's choice not to use a future test year in this case ends the discussion, and that ComEd may not be criticized for declining to manage its risks.

IIEC notes that a future test year is not the only regulatory mechanism available to manage that risk. ComEd can mitigate sales loss risk by implementing pricing structures that do not expose ComEd to the same loss of revenue caused by reduced kWh sales. In fact, IIEC contends ComEd has demonstrated both the range of available mechanisms and its ability to manage sales loss risk by simultaneously proposing a straight fixed variable rate design.

Substituting Commission action, in the form of an adder to ComEd's ROE in place of risk management by the utility reduces regulatory efficiency, and it excuses the utility from its responsibility to manage risks. IIEC says ComEd's proposed adder would substitute an inflation of its allowed ROE for more customary and more equitable responses to risk that the utility simply has declined to implement -- *viz.*, using a future test year or more refined forecasts of load changes to set rates.

In any case, IIEC opines that the basis for a 40 basis point adder remains unexplained in this record. ComEd witnesses did not explain why that number is the correct figure or even a just and reasonable figure. IIEC says that in fact, the 40 basis point figure was not even developed by ComEd's principal witness on the adder Ms. Tierney. The number was chosen by ComEd's Chief Financial Officer Joseph Trpik, who did not provide supporting testimony for the adder. Nor did he explain its derivation or objective. IIEC says that even if some basis for imposing an adder existed, there is no record basis for this particular adder.

IIEC concludes that fundamentally, ComEd is asking ratepayers to compensate the utility for risks that it can eliminate or mitigate through its own management actions. ComEd has not explained its decision to simply forego available opportunities to account for the foreseeable changes it offers as justification for the adder. IIEC says it is neither economically efficient nor



fair to ratepayers to compensate ComEd for foreseeable, manageable risks. Therefore the proposed adder should be rejected.

## **COMMISSION ANALYSIS AND CONCLUSION**

ComEd has proposed to augment its determined ROE with a 40 basis point adder. According to ComEd, the adder is necessary to reflect the adverse revenue effects of the Commission's ratemaking practices and compliance with EE/DR requirements. IIEC noted that some risks ComEd identifies are elements of rate setting that have been addressed in the past without ROE adders. In addition, several parties observed that the Commission's practices allow future test year filings that could take account of any reasonably anticipated effects of EE/DR activities. Finally, IIEC emphasizes that the adder is not needed for ComEd to manage the risks the utility identifies as justification, concluding that ComEd is not subject to an unavoidable risk for which it should be compensated.

The Commission agrees. In fact, ComEd's requests for various forms of regulatory relief in this proceeding illustrate an ability to manage the risks associated with the proposed adder. Moreover, the Commission finds that an adder is an inappropriate response to the identified risk. Even if usage reductions never occurred, the proposed adder would still impose higher rates on customers and yield a higher authorized return for ComEd. Substituting Commission action in the form of an adder to ComEd's ROE in place of risk management by the utility reduces regulatory efficiency, and it excuses the utility from its responsibility to manage operational risks. Further, the specific magnitude of the proposed adder has not been explained or justified. The Commission will not adopt ComEd's proposed 40 basis point adder.

## **VII. COST OF SERVICE AND ALLOCATION ISSUES**

### **A. Overview**

#### **IIEC's Position**

IIEC states that for the third time in the last four years, it has been compelled to address persistent significant problems in ComEd's cost of service study/studies ("ECOSS" or "ECOS Study") and in the primary/secondary split ("P/S") analysis incorporated in its studies. IIEC points out that it participated in ComEd's last rate case, Docket No. 07-0566, and the most recent ComEd rate design investigation case, Docket No. 08-0532. IIEC claims that in Docket No. 07-0566, it and other parties identified several flaws in the ECOS Study presented by ComEd. (*See, Re: Commonwealth Edison Company*, Docket No. 07-0566, Order, Sept. 10, 2008 at 159-213). In that case, IIEC showed that a properly performed ECOS Study recognizes that primary voltage customers benefit from the transmission, subtransmission and primary distribution systems, and that they do not use or benefit from the secondary distribution system. (*Id.* at 173). IIEC also argued in that case that a proper ECOS Study minimizes the chance that primary voltage customers would be allocated secondary distribution system costs. (*Id.*). IIEC argued that ComEd's ECOS Study in Docket No. 07-0566 allocated secondary distribution system costs to customers taking service directly from ComEd's primary system and, therefore, averred that it was not a properly performed study. (*Id.* at 175-176).

IIEC cites to our order in that case, where we determined:

. . . the proper assignment of primary and secondary distribution costs would likely reduce the total cost allocation to customers in the Extra Large Load, High Voltage and Railroad classes.  
(*Id.* at 213).

IIEC claims that we also found that the ECOS Study presented by ComEd in Docket 07-0566 was “. . . deficient in not separating and properly allocating primary and secondary service costs” and concluded “. . . as we have noted, the substantial deficiencies in specific elements of the ECOS render it problematic for purposes of setting rates in this docket.” (*Id.* at 207, 213). Accordingly, we refused to move rates for the ELL, HV and Railroad delivery service classes ComEd’s recommended fifty percent (50%) of the way to cost of service, as measured by its flawed ECOS Study. Instead, we determined that rates should be moved only twenty-five percent (25%) of the way to cost as measured by that study. (*Id.* at 213, 236-237).

IIEC further points out that, on the same day we entered our Final Order in Docket No. 07-0566, we initiated an investigation of ComEd’s rate design pursuant to Section 9-250 of the PUA. (220 ILCS 5/9-250). (*Illinois Com. Comm’n v. Commonwealth Edison Company*, Docket No. 08-0532, Initiating Order, September 10, 2008). IIEC says that in our Initiating Order, we again identified the deficiencies we had found in ComEd’s Docket No. 07-0566 ECOS Study, including our finding that the study failed to separate and properly allocate primary and secondary service costs. (*Id.* at 2). To facilitate the rate investigation, we directed ComEd to provide an updated ECOS Study that:

- (1) differentiated between primary and secondary voltage levels;
- (2) analyzed the cost of providing Customer Care to a customer taking supply from an alternative supplier vs. the cost of providing Customer Care to a customer taking supply from ComEd;
- (3) analyzed the extent to which usage contributed to certain kinds of customer costs and whether factors other than the number of customers in a class should be taken into account in the assignment of such cost;
- (4) allocated uncollectible expense across all residential rate classes; and
- (5) took into account ownership and maintenance responsibilities for street lighting in the City of Chicago and other municipalities and allocated costs accordingly.  
(*Id.*).

IIEC claims that we determined that the requested ECOS Study and analyses were needed to determine the changes, if any, necessary to ensure that ComEd’s rate structure was just and reasonable. (*Id.* at 3).

According to IIEC, in our Final Order in Docket No. 08-0532 (the “Rate Design Investigation Order” or “RDIO”) , we again highlighted ComEd’s failure to separate and properly allocate primary and secondary service costs as a major deficiency in ComEd’s ECOS Study (citing to *Illinois Com. Comm’n v. Commonwealth Edison Company*, Investigation of Rate Design Pursuant to Section 9-250 of the Public Utilities Act, Docket No. 08-0532, Final Order, Apr. 21, 2010 at 35). According to IIEC, the RDIO noted IIEC’s position that ComEd’s definition of its primary and secondary systems categorized certain facilities as primary, even though they were used exclusively or primarily to provide service at secondary voltages. (*Id.* at 37). IIEC states that he RDIO also noted IIEC’s challenges to ComEd’s classification of line transformers and single-phase primary voltage level circuits as primary system facilities, and that we agreed that line transformers used exclusively to serve customers at secondary voltage were not properly allocated to customers taking service at primary voltage, where we stated:

We find that ComEd’s current method of allocating transformer costs is not appropriate. When the existing voltage of the transformer is secondary, the transformer can only serve secondary customers and should be allocated as a secondary system cost. (*Id.* at 38).

IIEC also highlights that we also directed the parties to explore, in subsequent rate proceedings, whether certain techniques could be used to allocate costs to customer classes for underground circuits operating at primary voltage, but serving customers only at secondary voltage. (*Id.*). Finally, the Commission, consistent with its overall conclusions, directed ComEd: “to develop and provide in its next rate proceeding:

- (1) direct observation or sampling and estimation techniques of ComEd’s system to develop more accurate and transparent differentiation of primary and secondary costs;
- (2) other utilities’ methods of differentiating primary and secondary systems and costs;
- (3) function based definitions of service voltages for facilities other than the line transformers already addressed;
- (4) an analysis of which customer groups are served by which system service component; and
- (5) consideration of redefining rate classes on the basis of voltage or equipment usage to better reflect the cost of service.” (*Id.* at 40).

In this case, IIEC opines that, in spite of the Commission’s directives, ComEd presented a cost of service study in its direct testimony that did not comply with all of those directives. ComEd was granted leave to present supplemental direct testimony in order to present an additional ECOS Study that would comply with the Commission’s directives. However,

according to IIEC the ECOS Studies in its supplemental testimony also filed to comply with the directives for function based definitions for facilities. ComEd presented three more ECOS Studies in its rebuttal testimony. Each of these studies failed to fully comply with the Commission's directives as well. Finally, ComEd presented in surrebuttal three more ECOS Studies (Heintz, ComEd. Ex. 75.1, 75.2 and 75.3), which, like their predecessors, also failed to fully comply with the Commission's prior directives. These final three studies constitute ComEd's ultimate positions in this case. IIEC adopted ComEd's nomenclature for the studies, namely ComEd's "Proposed" (ComEd Ex. 75.1), "Preferred Exemplar" (ComEd Ex. 75.2) and "Alternative Exemplar" (ComEd 75.3) ECOS Studies.

IIEC claims that, while ComEd's studies make certain corrections recommended by IIEC, they still do not fully comply with the Commission RDIO directives, in that the studies do not use function-based definitions for single-phase primary facilities and, therefore, misallocate the cost of these facilities to primary voltage customers. IIEC avers that, according to ComEd, this study is substantially the same as the studies presented in prior ComEd delivery service rate cases, and used by the Commission as part of its rate setting process. Thus, IIEC says ComEd proposes that the Commission adopt essentially the same ECOS Study IIEC claims we identified in Docket No. 07-0566 as inaccurate and unsuitable for use in moving ComEd's rates even fifty percent (50%) of the way to cost. IIEC posits that ComEd's Proposed ECOS Study in this case, the successor to the deficient and inaccurate studies described above, is still deficient and inaccurate. IIEC recommends we reject ComEd's Proposed Study (which it claims we found deficient in two consecutive ComEd cases) once and for all.

IIEC was the only party other than ComEd to provide an ECOS study in this case. IIEC claims that its ECOS Study complies with the RDIO directives, by recognizing function based definitions of service voltages for facilities other than the line transformers (by allocating single-phase primary costs to secondary customers), but uses NCP allocators for primary lines and substations instead of the CP allocators. IIEC states that its ECOS Study does not incorporate IIEC's proposed allocation of the IEDT, although IIEC claims that such an incorporation can be made readily if the Commission approves same.

**C. Potentially Contested Issues**  
**1. Embedded Cost of Service Study Issues**  
**a. Class Definitions**  
**(ii) Non-Residential**

**IIEC's Position**

IIEC claims that definition of delivery service classes is a prerequisite to determining class cost of service. Said differently, one must define the customer classes before one can seek to determine the level of cost caused by each class. Differing rate class definitions account for some of the variation in the ECOS Studies presented in this case.

According to IIEC, ComEd's Proposed ECOS Study, presented in ComEd Ex. 75.1, utilizes existing delivery service class definitions. ComEd's Preferred Exemplar ECOS Study, presented in ComEd Ex. 75.2, redefines the delivery service classes by creating a new PVD

class, consisting of customers removed from the Small Load (“SL”), Medium Load (“ML”), Large Load (“LL”), Very Large Load (“VLL”) and Extra Large load (“ELL”) delivery classes – thus redefining those classes as well. Finally, IIEC says ComEd’s Alternative Exemplar ECOS Study, presented in ComEd Ex. 75.3, uses existing delivery service class definitions, but differentiates primary and secondary subclasses within the existing classes.

IIEC’s ECOS Study, presented by IIEC witness Stowe in IIEC Ex. 3.0-C and IIEC Ex. 6.0, utilizes existing rate class definitions, but divides the SL through ELL classes into primary and secondary service subclasses, in order to examine the cost of serving these subclasses. According IIEC, its ECOS Study most closely resembles ComEd’s Alternative Exemplar ECOS Study (ComEd Ex. 75.3) in this regard.

IIEC opposes ComEd’s Proposed ECOS Study (ComEd Ex. 75.1) because, in addition to the claimed flaws discussed below, it does not provide for voltage differentiated subclasses in the ML through ELL classes. IIEC opposes ComEd’s Preferred Exemplar ECOS Study (ComEd Ex. 75.2) because, among other things, it utilizes a new PVD service class that aggregates customers with dissimilar costs and demand characteristics. IIEC proposes that the current delivery service rate classes be retained and that the distinctive delivery service costs associated with voltage differences be reflected by creating two subclasses within the ML, LL, VLL and ELL delivery service rate classes, a primary voltage subclass and a secondary voltage subclass. IIEC avers that ComEd’s Alternative Exemplar rate structure is similar to IIEC’s recommended rate structure. However, IIEC’s rate structure is preferable to ComEd’s Alternative Exemplar rate structure for examining class costs in this case, according to IIEC, because it best meets the RDIO’s voltage differentiated class directive.

## **COMMISSION ANALYSIS AND CONCLUSION**

We agree with IIEC’s main point, which is that definition of delivery service classes is a prerequisite to determining class cost of service, and that one must define the customer classes before one can seek to determine the level of cost caused by each class. Accordingly, our conclusions on rate class structure, determined in Section VII.C.3, below, are a determinative factor in helping to establish the ECOS Study or studies we consider appropriate. Consistent with our findings in Docket No. 08-0532, we have concluded that a rate class structure that does not recognize service voltage level differences for non-residential classes is inappropriate. ComEd’s Proposed ECOS study does not contain such a structure. Therefore, that study is not useful. ComEd’s Preferred Exemplar and Alternative Exemplar studies, along with IIEC’s ECOS study, each recognized voltage differences in rates and, accordingly, would be acceptable, in terms of class structures. However, since we have concluded in Section VII.C.3 that \_\_\_\_\_ [“IIEC’s”, “ComEd’s Preferred Exemplar” or “ComEd’s Alternative Exemplar”] rate structure is appropriate, the associated class definition will form the basis for analysis of class costs in the ECOS Study.

This decision on class definition is not dispositive of the various classification or allocation issues addressed hereinafter.

- b. Primary/Secondary Split**
  - (i) Appropriate Methodology/Compliance with Dkt. No. 08-0532**
    - (a) Functionalized Identification Costs**

## **IIEC's Position**

### *i. Line Transformers*

IIEC notes that ComEd has performed two P/S analyses in this case. The results of ComEd's first P/S analysis, which was presented in ComEd Ex. 16.5, were used in ComEd's Proposed ECOS study (ComEd Ex. 75.1). Similarly, the results of ComEd's second P/S analysis, presented in ComEd Ex. 21.5 (later revised in ComEd Ex. 49.4) served as the basis for ComEd's Preferred Exemplar ECOS study (ComEd Ex. 75.2) and its Alternative Exemplar ECOSS (ComEd Ex. 75.3). IIEC further indicates that because ComEd's ECOSS studies are based on the results of these P/S analyses, errors in these P/S analyses consequently result in errors in the associated ECOSSs and rate designs.

IIEC finds the major deficiencies in ComEd's ECOSS are due principally to the fact that ComEd continues to define facilities as primary or secondary based on the facilities' energized voltage levels in its P/S analyses and ECOS studies. IIEC claims that ComEd's identification and allocation of costs associated with line transformer and single-phase primary facilities are key examples of this deficiency. IIEC notes that in its RDIO, the Commission found: "... that the cost of line transformers used exclusively to serve customers at secondary voltages should not be allocated to customers taking service at primary voltages." (RDIO at 38). Given the unambiguous nature of the Commission's RDIO directive regarding line transformers, IIEC claims it is reasonable to expect ComEd to develop a P/S analysis, ECOS study and rate design wherein the cost of line transformers used exclusively to serve secondary voltage customers are allocated exclusively to secondary voltage customers.

IIEC notes that the first P/S analysis ComEd presented in this case (ComEd Ex. 16.5) does not functionally separate the cost of line transformers. Consequently, ComEd's Proposed ECOS study (ComEd Ex. 75.1), which is based the results of the analysis presented the P/S analysis in ComEd Ex. 16.5, does not functionally separate these costs, but instead allocates them to primary and secondary customers, according to IIEC.

IIEC argues that ComEd was fully aware of its non-compliance to this (and other) directives, and even provided a list of the Commission's directives with which its initial filing allegedly complied. IIEC notes that the compliant treatment of line transformer costs was conspicuously absent from that list. IIEC claims ComEd's promise to file Supplemental Direct that "fully complied with the RDIO" also demonstrates that ComEd recognized its first P/S analysis - and the associated ECOS study and rate design - did not fully comply with the Commission directives. IIEC further asserts that, ComEd's knowledge of non-compliance and promises of future compliance notwithstanding, ComEd's subsequent iterations of its Proposed ECOS studies (ComEd Ex. 50.1 and ComEd Ex. 75.1) were again based on the non-compliant P/S analysis (ComEd Ex. 16.5) provided in ComEd's direct testimony.

IIEC points out that, in the RDIO, the Commission stated:

We find that ComEd's current method of allocating transformer costs is not appropriate. When the existing voltage of the transformer is secondary, the transformer can only serve secondary customers and should be allocated as a secondary system cost.”  
(RDIO at 38).

IIEC draws attention to the fact that ComEd's claim to have “complied with the Commission's directives and incorporated a primary/secondary analysis into its ECOSS and proposed rate design filed in this proceeding on June 30, 2010.” (ComEd Br. at 107). According to IIEC, ComEd's continued insistence of compliance is both puzzling and also belied by a review of ComEd's own evidence, specifically its proposed ECOS Study. The clarity of the Commission's directive (quoted above) precludes any reasonable possibility that ComEd believes it was not ordered to allocate line transformers only to secondary customers, in IIEC's opinion. More plausible to IIEC is the possibility that ComEd is simply unaware that its Proposed ECOS Study (ComEd Ex. 75.1) does not comply with the Commission's directive on allocating line transformer costs, based on its cross-examination of the relevant ComEd witness. Whatever the cause, IIEC says it has demonstrated that ComEd's Proposed ECOS Study does not functionally separate the costs of line transformers as directed, nor does it restrict the allocation of costs associated with line transformers used exclusively for secondary customers, to secondary customers.

Using excerpts from ComEd's Exhibit 75.1, IIEC claims it showed; (1) that the total rate base associated with line transformers is \$556,197,492 (App. A at A-1, ln 116, col Line Transformers), (2) that these line transformer costs are not functionally separated into primary and secondary portions, (3) the \$556,197,492 in Line Transformer rate base is allocated to every customer class (with the exception of the railroad class), and finally, (4) the allocation factor ComEd used to distribute line transformer rate base costs among the customer classes (NCP-LINE TR) was not adjusted to reflect only the loads delivered through line transformers, and consequently allocate costs as though 100% of line transformers serve the loads of both primary and secondary customers.

## **COMMISSION ANALYSIS AND CONCLUSION**

It is clear from the evidence presented by ComEd and IIEC that ComEd's proposed cost of service study does not allocate the costs of line transformers exclusively to secondary voltage customers, despite our conclusion and direction in Docket No. 08-0532. Since the function of these facilities (which transform electricity to secondary voltages) is to serve customers taking service at secondary voltage, their cost is appropriately allocated to secondary customers only. This function, not the fact that the energized voltage of the transformers may be at a primary voltage, should determine the responsibility for their costs. This conclusion is consistent with our findings and conclusions in Docket No. 08-0532.

Accordingly, ComEd's proposed cost of service study, as presented in ComEd Ex. 75.1, cannot be approved. We note that this outcome is consistent with our earlier rejection of ComEd's proposed rate structure, as the structure of ComEd's cost of service study and the rate design are tied to each other.

Our rejection of ComEd's misallocation of line transformers does not affect ComEd's Preferred Exemplar (ComEd Ex. 75.2) or Alternative Exemplar (ComEd Ex. 75.3) cost of service studies, since these studies are understood to comply with our directive respecting line transformers.

## **IIEC's Position**

### *ii. Single-Phase Primary Lines.*

IIEC avers that, similar to line transformers, certain other facilities energized at primary voltages function only to serve customers at secondary voltages. IIEC indicates the Commission recognized the importance of function in its RDIO, expanding the lesson of its line transformer finding by directing ComEd to develop and provide, in this rate proceeding, "function based definitions of service voltages for facilities other than the line transformers. . .". (RDIO at 40, (emphasis added)).

IIEC claims ComEd has ignored this directive in both its P/S analyses (ComEd Ex. 16.5 and ComEd Ex. 22.5), and that ComEd's failure to provide "function based definitions of service voltages of facilities" is at the heart of ComEd's inappropriate allocation of line transformer costs. IIEC argues this same failure affects the utility's categorization of the costs, in particular, of single-phase primary circuits on the basis of voltage level rather than function.

IIEC witness Stowe, a professional electrical engineer, testified:

In electrical distribution systems, the term "phase" simply refers to an energized conductor. Single-phase primary distribution circuits are composed of a single conductor that is energized to a primary voltage level, and a ground or neutral conductor. Three-phase primary distribution circuits consist of three energized conductors and a ground or neutral conductor. (Stowe, IIEC Ex. 3.0-C at 11:266-271)

\* \* \* \*

Because serving a primary voltage customer using single-phase distribution circuits can lead to localized system load imbalances and voltage instabilities, costs of single-phase primary distribution circuits are incurred predominantly, if not exclusively, to serve secondary voltage customers. (Stowe, IIEC Ex. 3.0-C at 12:280-290).

According to IIEC, ComEd operates nearly 28,000 miles of overhead and underground, primary distribution circuits that are configured as single-phase. IIEC indicates that while hundreds of



thousands or even millions of ComEd's customers are served from these single-phase circuits, almost none of those customers are primary voltage customers. Using information provided by ComEd testimony, IIEC asserts that only 21 of ComEd's primary voltage customers receive single-phase service. However, IIEC also points out that this does not mean all 21 of these primary voltage customers are served by a single-phase primary line or circuit. Single-phase service can be supplied by connecting the customers' service to one of the three-phases in a three-phase circuit, or by connecting the customer to a single-phase circuit. IIEC also asserts, again using data provided by ComEd, that of ComEd's 21 primary voltage customers that receive single-phase service, only eight are supplied by single-phase primary circuits. IIEC points out that the fact that ComEd provides single-phase service to only 21 (2.2%) of its 936 primary voltage customers, and of these, only eight of these receive that single-phase service from single-phase supply circuits, confirms Mr. Stowe's analysis.

IIEC then indicates that both of ComEd's P/S analyses, (ComEd Ex. 16.5 and ComEd Ex. 21.5) combine the costs of single-phase and multi-phase circuits and allocate them on the same basis. IIEC argues that when the results of ComEd's P/S analysis are reflected in its ECOS studies, single-phase primary circuit costs are misallocated and the cost of distributing electricity to primary customers is overstated.

IIEC replied to ComEd's assertion that IIEC contends "...only customers that take service from a single-phase circuit should be responsible for those costs." In response, IIEC denies ComEd's assertion and claims ComEd has misrepresented its proposal. IIEC insists that it has consistently testified that single-phase facilities are almost never used to serve primary voltage customers, therefore, primary customers should not be allocated costs of those facilities. As to the allocation among secondary customers, IIEC has always said the cost of single-phase circuits should be allocated to all secondary voltage customers. IIEC claims that Mr. Stowe has consistently explained this allocation treatment – in this case, and previously in his direct and rebuttal testimonies in Docket No. 08-0532.

IIEC responds to ComEd's objection to IIEC's proposal to allocate single-phase primary circuit costs to secondary customers because it "would require a much more complex analysis than IIEC has presented to take into account the parts of ComEd's system that certain customers use more intensively than others, while maintaining equity among customers." IIEC describes this assertion by ComEd as a red herring. IIEC argues that ComEd only needs to separate single-phase primary circuit costs from dual-phase and three-phase costs, and to allocate the single-phase costs to secondary customers only. IIEC claims that this separation of costs has already been performed by IIEC using data provided by ComEd. As such, IIEC claimed that, no complex analysis is required.

IIEC also responded to Staff's objections to IIEC's proposal regarding the allocation of single-phase primary lines. According to IIEC, Staff claims that the problem with IIEC's proposal "lies with Mr. Stowe's claim that primary customers cannot be served by single-phase lines. . . ." (Staff Initial Brief at 96). IIEC says Staff then concludes "[i]f true, the Company has no choice but to use three-phase distribution lines to serve primary customers." In this, Staff perceived a problem of extra costs for multi-phase circuits, in IIEC's estimation.

IIEC avers that Staff's conclusion is based on a false premise. IIEC says Mr. Stowe testified, "a primary voltage customer could receive single-phase, dual-phase or three-phase service." (Stowe, IIEC Ex. 3.0-C at 12:280-283). Mr. Stowe testified that due to the potential for load and voltage imbalances, utilities rarely, if ever, choose to use single-phase primary circuits to serve primary voltage customers. (Stowe, IIEC Ex. 3.0-C at 12:284-290). Finally, IIEC points out that Staff witness Lazare agreed during cross-examination that -- to the extent that the Commission desired the use of function-based definitions for distribution facilities -- it would be consistent with the Commission's intent to functionalize single-phase circuit costs as secondary costs, and to allocate them accordingly, if single-phase primary facilities are shown to only be used to serve secondary customers. (Lazare, Jan. 12 Tr. 897-898).

## **COMMISSION ANALYSIS AND CONCLUSION**

We have reviewed ComEd's treatment of single-phase primary line costs against our direction to ComEd in Docket No. 08-0532 to develop and provide in its next rate proceeding: "... (3) function based definitions of service voltages for facilities other than the line transformers already addressed." This direction meant, and continues to mean, that ComEd should determine the function of its facilities in providing service and which customers certain facilities serve, especially whether primary or secondary voltage customers, instead of the energized voltage of the facilities themselves. This is what we found for line transformers in Docket No. 08-0532, and reiterated in this case. No other interpretation of our direction in Docket No. 08-0532 is reasonable, particularly in view of our specific instruction for the treatment of line transformers.

We are persuaded by the evidence in this record that single-phase primary facilities function almost exclusively, to serve secondary customers. Indeed, we find no credible argument to the contrary in any of the parties' testimony. Therefore, the costs of such facilities, as determined by the IIEC cost of service study, should be allocated to secondary voltage customers only. No other party provided a determination of these single-phase primary facilities costs. The fact that a very small fraction of ComEd's single-phase primary lines may be used to serve 8 customers on ComEd's system (of nearly 4 million customers) does not require a fractional allocation in this analysis.

Although Staff acknowledges that single-phase primary facilities serve secondary customers, it recommends denial of IIEC's allocation based on its proposition that primary customers may require three-phase facilities that cause incremental costs that should not be borne by secondary customers. This raises an interesting question, but Staff has not identified any categories of three-phase facilities that exist solely to serve customers at primary voltages. Furthermore, part of the premise of Staff's position appears to be that only primary voltage customers are served by three-phase lines. However, the record evidence shows that not only are secondary voltage customers served by three-phase lines, ComEd would almost exclusively use three-phase lines for its distribution system even if all of its customers were secondary voltage customers. Under the circumstances, we cannot conclude that there is a major cost allocation issue here that would warrant any delay in properly allocating the cost of single-phase primary lines (used to serve only secondary customers) in this case. Moreover, Staff raised this hypothesis in rebuttal testimony, which did not allow for parties other than ComEd to respond. One result is that the record lacks actual evidence of such facilities, let alone any quantification

of the costs that may be at issue. As a result, we are unable to determine whether, or how much, such facilities cost might offset the allocation of single-phase facilities costs to secondary customers. We cannot conclude that there would be a one-for-one offset, which would be the practical effect of Staff's recommendation to deny the single-phase adjustment proffered by IIEC. Staff and interested parties may explore this issue of quantifying three-phase facility costs that should be allocated exclusively to primary customers further in the next rate case, should they desire.

- d. NCP vs. CP**
- and**
- e. Allocation of Primary Lines and Substations**

### **IIEC's Position**

IIEC states that in Docket 08-0532, the Commission was persuaded that the allocation of costs associated with distribution substations and primary lines should be made on a CP basis because; (1) substations and primary lines were not "sized to meet the demands of any single class, but rather the collective demands of customers from multiple classes, and (2) lighting class demand does not coincide with system peak demands, and therefore plays a lesser role in shaping substation and primary line investments than class demands that are coincident with the system peak. In IIEC's view, such an allocation is inconsistent with actual cost causation on the ComEd system. IIEC recognizes that ComEd has used the CP allocation in this case at the direction of the Commission, but is requesting that the Commission reconsider the wisdom of using this allocation for primary lines and substations.

With regard to the Commission's first stated basis for its conclusion, i.e., that substations and primary lines were not sized to meet the demands of any single class, but rather the collective demands of customers from multiple classes, IIEC claims it provided un-refuted testimony that the NCP method, like the CP method, reflects the demands of all classes. Mr. Stowe testified that "[t]he difference between the two methods is that the CP method focuses on the load contribution of each class during a particular hour of the year, whereas the NCP method reflects a theoretical or "worst case" estimate of the potential load distributions." (Stowe, IIEC Ex. 3.0-C at 23:521-524). IIEC asserts that while the Commission is certainly correct that substations and primary lines are sized to meet the collective demands of customers from multiple classes, this fact does not disqualify the NCP method since the NCP method considers the collective demand of all classes as well.

The Commission's second concern, i.e., that lighting class demand does not coincide with the system peak demand, and therefore, plays a lesser role in shaping the substation and primary line investments is, according to IIEC, based on the faulty assumption that distribution facilities (as opposed to transmission or generation facilities) are designed to serve the system peak demand. IIEC agrees that if utility engineers and planners designed primary distribution circuits and substations to serve the load of the customers connected to them at the time of the system peak, use of the CP allocation method would be reasonable and appropriate. IIEC argues, however, that such is not the case, but instead that primary circuits and substations are designed

to provide safe and reliable power under both normal and extraordinary conditions, and at any time of the day.

IIEC points out that ComEd witness Michael McMahan, a professional electrical engineer, testified that in preparing to construct or enhance distribution facilities, distribution system designers look at the “aggregate” or “area” load that the particular distribution facilities (e.g., particular substations or primary circuits) must serve, not the system loads. Furthermore, IIEC shows that Mr. McMahan testified that this aggregate load is based on ComEd’s “1 in 10-year” planning criteria, which use the highest annual system peak load in the previous 10 years combined with a projected load forecasted for the particular distribution facilities in question. IIEC argues that by using the highest single load in a 10-year period, and then increasing this load by a projected load estimate, system planners develop a load estimate that will occur only in worst-case situations. IIEC witness Mr. Stowe stated “system designers cannot simply design the primary circuits and substations to distribute the amount of power that flowed through the primary distribution system during a historical system peak hour. Rather, they must rely on estimates – in particular, ‘worst case’ estimates – when designing the system for future use.” ComEd agrees that its system planners rely on “worst case” scenarios, according to IIEC. IIEC claims that the test year CP demands that ComEd used to allocate costs in this case reflect the class loads during a single hour of a summer day in 2009, and that these CP demands have no meaningful relationship to the aggregate or area load estimates used by ComEd engineers to design and construct distribution facilities. IIEC asserts that NCP demands, however, reflect the maximum potential demand of the customer classes served via the distribution system, regardless of when that demand occurs, and as such, NCP demands provide a reasonable proxy for the aggregate load estimate used by system planners.

IIEC recalls that ComEd has testified in this case, as well as in Docket 08-0532, that it designs its primary lines and substations on the basis of NCP, and not CP, demands. ComEd witness testified that ComEd designs its primary lines and substations based on the non-coincident peak that occurs on those facilities, not the system coincident peak.

IIEC avers that the testimonies of ComEd witnesses comport with the direct testimony of IIEC with respect to the CP vs. NCP issue.

IIEC has further argued that it is the CP method - not the NCP method - that fails to reflect the combined customer class load that ComEd distribution designers relied upon when they designed the Company’s primary lines and substations. IIEC claims the CP method fails to allocate costs in accordance with how those costs were incurred. Mr. Stowe testified that the “NCP demands of the Fixture Included Lighting and Dawn-to-Dusk lighting classes are nearly 7,300% of, or 73 times, their respective CP demands.” (Stowe, IIEC Ex. 3.0-C at 22:493-494). According to IIEC, when ComEd designs, builds, upgrades and maintains its primary lines and substations, incurring investments and expenses to serve the NCP demand of its customers, yet allocates these costs to the classes on the basis of class CP demand, it significantly understates the costs incurred to serve Fixture Included Lighting and Dawn-to-Dusk lighting classes. IIEC asserts that this is the case because the CP demands that are used to allocate costs are derived from the class contribution to the test year’s system peak demand, whereas the aggregate load estimate for primary lines and substations are based on the highest “1 in 10-year” demand plus

projected demand on those facilities. Finally, IIEC points out that the use of NCP method to allocate primary distribution costs is also the industry's preferred method for allocating distribution substation and primary lines, as indicated in the 1992 publication of the National Association of Regulatory Utility Commissioners Electric Utility Cost Allocation Manual ("NARUC Manual"):

Distribution substations are designed to meet the maximum load from the distribution feeders emanating from the substation. Similarly, when designing primary and secondary distribution feeders, the distribution engineer ensures that sufficient conductor and transformer capacity is available to meet the customer's loads at the primary- and secondary-distribution service levels... Consequently, customer-class non-coincident demands (NCPs) and individual customer maximum demands are the load characteristics that are normally used to allocate the demand component of distribution facilities... The load diversity at distribution substations and primary feeders is usually high. For this reason, customer-class peaks are normally used for the allocation of these facilities. (NARUC Manual at 96 and 97).

In regard to the issue of whether NCP or CP demands best reflect the aggregate demands used by system designers to construct distribution substations and primary circuits, Staff rejects the evidence presented by IIEC's and ComEd's electrical engineering witnesses, and prefers testimony of a non-engineer ComEd witness Mr. Hemphill as "evidence" supporting the use of the CP methodology. IIEC asserts that Staff's alleged "evidence" is problematic. First, IIEC points out that Dr. Hemphill, whose testimony Staff relies upon, clearly did not intend for his opinions to contradict the testimony of other ComEd witnesses whose responsibilities include system planning and engineering. IIEC notes that Dr. Hemphill clarified that he was neither a facilities planner nor a distribution system engineer on two occasions during his cross examination. Thus, IIEC argues his testimony on this matter is of (admittedly) limited evidentiary value.

Nonetheless, IIEC also points out that the testimony of Dr. Hemphill makes essentially the same points as that of ComEd engineers Mr. Alongi and Mr. McMahan, i.e., that distribution facilities such as substations and primary circuits are designed to meet the highest combined peak demand of the customers connected to them, regardless of when that peak demand occurs. IIEC asserts that Staff improperly assumes Dr. Hemphill's testimony contradicts the position of ComEd's engineering witnesses, who have already made clear that ComEd does not design these distribution facilities to meet CP demand as Staff assumes.

IIEC says the City supports the CP allocation method over the NCP method. However, IIEC asserts that the City's logic is contradictory. IIEC points out that the City defines coincident peak demand as "... the demand of a consumer at the time the system reaches its peak load for the entire year." IIEC suggests that the City has testified "that it is obvious that ComEd does not build its system on 'system-wide' coincident peak. IIEC considers both of these

statements to be reasonable and supported by evidence in the record in this case. In light of these statements by the City, IIEC asserts that the City contradicts itself in supporting an allocation of the cost of distribution facilities using a CP method. IIEC avers the use of the CP allocator assumes that ComEd designs and builds its system to meet peak demands coincident with the system peak. IIEC agrees with the City that ComEd does not design and build its system to meet system coincident peak demand. Therefore, use of the system coincident peak allocator for allocation of primary lines and substations is not appropriate.

## **COMMISSION ANALYSIS AND CONCLUSION**

As a preliminary matter, we acknowledge that ComEd's cost of service study has traditionally used the NCP allocator for primary lines and substations and that our decision in Docket No. 08-0532 compelled ComEd to file its cost of service study in this case using a CP allocator. ComEd has complied with our directive. However, in reaching our decision in Docket No. 08-0532, we did not state that we would not consider further evidence on this matter in subsequent rate cases, including this one. Indeed, while our conclusion in Docket No. 08-0532 was supported by substantial evidence in that case, it is clear that the issue was not fully developed in the case, as compared to the evidence adduced in the case at bar. We would not be prohibited from finding in this case that either a CP or NCP allocator is appropriate, based on the evidence. We note that, since we did not modify rates in Docket No. 08-0532, ComEd's delivery rates to date have not been based on a cost of service study utilizing a CP allocator for primary lines and substations.

The evidence of ComEd and intervenor engineers about distribution system planning is persuasive. According to these witnesses, the local distribution systems, i.e. the circuits in various parts of ComEd's territory must be sized to adequately handle the maximum demands on those particular circuits, no matter when they occur. For some circuits, this presumably would be at the time of ComEd's system peak, for others it may not be. In any event, since the systems are sized to meet the localized peaks, as opposed to the overall ComEd system peak (which is measured as CP), we must determine which allocation approach best reflects the contribution of customers to localized peaks.

The evidence is clear that all customer classes contribute to some degree, to the localized, or circuit peaks. Both the CP and NCP allocators take into account a proportion of all classes' loads. However, a CP allocator assigns virtually no cost responsibility to off-peak loads, such as lighting. This would be true even if a circuit was built exclusively to serve off-peak loads, since the CP of such a class would be minimal. If classes with significant off-peak loads utilize the primary circuits, which they do, and can affect local circuit design capacity, since localized facilities are sized to meet circuit maximum load, it is reasonable that they should be allocated a reasonable share of primary circuit costs.

Having considered the technical evidence of the parties in this case, along with the evidence about industry practice and the clear language of the NARUC Electric Utility Cost Allocation Manual, we are persuaded that the NCP allocator better reflects cost causation of the primary distribution system than does the CP allocator. ComEd is directed to modify its cost of service study to utilize such allocators.

That this conclusion is a reversal of our prior decision in Docket No. 08-0532 is not of particular concern, as the evidence is different, and generally more conclusive, in this case. Further, as noted above, approving the use of NCP allocator in this case has the practical effect of simply maintaining the allocator traditionally used by ComEd. As Staff and others point out, we approved the use of a CP allocator in the recent Ameren rate cases as well, Docket No. 09-0306, et. al. (cons). Our decision in those cases was based on the record adduced therein. It is not in any way controlling in this case, which involves a different evidentiary record.

#### **h. Allocation of Illinois Electricity Distribution Tax**

##### **IIEC's Position**

According to IIEC, since the elimination of the personal property tax in 1970, Illinois utilities have been subject to a tax on invested capital, pursuant to the Public Utilities Revenue Act (35 ILCS 620/1 et. seq.). Prior to 1998, for electric utilities, the tax was assessed at a rate of 0.8%. In 1997, in conjunction with the Electric Service Customer Choice and Rate Relief Law of 1997, (the "Restructuring Law" - Public Act 90-561), the Illinois legislature determined that it would change the computation of the tax to keep it competitively neutral, while maintaining essentially the same level of tax revenues (adjusted for inflation) from each of the Illinois electric utilities, individually and in the aggregate, through a series of charges designed to be applied to each utility's delivered energy. (35 ILCS 620/1(a)). ComEd has allocated this tax in delivery service rates since 1999 on the basis of kWh delivered. IIEC proposes to modify the allocation in this case, to allocate a portion of the tax on the basis of allocated utility plant in service and a portion on the basis of kWh delivered, for the reasons described further below.

##### *a. Reasonableness of Current Allocation*

According to IIEC, the level of the IEDT was fixed at the level of tax imposed on electric utilities, on the basis of their invested capital (plant investment), prior to 1998. It has escalated each year by 5%, or the percentage increase in the Consumer Price Index ("CPI"), whichever is less. Thus, the total amount of tax imposed on Illinois electric utilities is capped at the level of tax on invested capital experienced by each utility in 1997, subject only to inflationary adjustments. The tax is not, and never has been, exclusively a function of kWh delivered.

IIEC opines that, while the growth in the level of the tax beyond the 1997 level is somewhat related to growth in kWh deliveries, that relationship exists only to a point. As noted above, the tax is essentially capped at the pre-1998 level of the invested capital tax adjusted for inflation. Therefore, says IIEC, per kWh sales/deliveries can play only a small role in the determination of the amount of tax paid by each utility.

IIEC asserts that, if the cap is reached in any particular year, increases in the number of kWh delivered by a utility do not automatically translate to additional IEDT responsibility. Collected tax revenues in excess of the cap in a given year are refunded to the utilities in proportion to their tax payments. Since the cap has been exceeded in every year since the IEDT was initiated, increases in kWh sales have not increased the utility's real tax burden beyond the

cap in any year since 1997. Thus, ComEd's current tax responsibility is not strictly a function of increases or decreases in kWh sales, according to IIEC.

IIEC posits that there are additional reasons, grounded in un-rebutted empirical evidence, why the claim that the IEDT is a direct function of kWh deliveries is incorrect. As IIEC witness Stephens demonstrated, when the IEDT cap is exceeded (as it regularly is) a utility's tax burden is dependent more on its proportional share of tax payments, in relation to other utilities, than it is on the change in its own kWh deliveries. If the utility maintains the same proportional share of deliveries over time, it makes no difference whether it delivers more or fewer kWh in a year; its tax burden remains the same, adjusted only for the lesser of a non-energy related 5% or the percentage change in the CPI. In fact, it is possible for the utility's tax burden to go down when its deliveries of kWh go up, and *vice versa*.

Furthermore, according to IIEC, there is not even a high statistical correlation between ComEd's tax burden and its kWh deliveries. IIEC witness Stephens presented a linear regression analysis of the relationship between IEDT paid by ComEd and total billed energy by ComEd for the years 2001 through and including 2009. This un-rebutted analysis demonstrated that kWh deliveries had only a weak explanative value for changes in the IEDT, which has a base amount that is exclusively a function of ComEd's pre-1998 invested capital, in IIEC's view. Thus, contrary to the position of Staff and ComEd, IIEC declares that ComEd's kWh sales do not cause (or even adequately explain) the levels of ComEd's IEDT burden.

In response to Staff's claim that changes in plant investment do not lead to changes in tax liability, IIEC points out that the bulk of ComEd's tax is not due to changing investment but to a static plant investment tax amount retained by the revised statute. Therefore, according to IIEC, the Commission is left with a choice; (1) allocate the tax on the basis of the kWh factor that modifies less than the last 10% of the tax; or (2) recognize that the tax paid by ComEd is a function of multiple factors, but is primarily a function of pre-1998 invested capital tax level, which in turn was a function of plant in-service. IIEC claims its allocation more closely reflects the reality that the Commission's policy on cost causation is meant to capture and that no party contends that the IEDT is entirely and exclusively a function of kWh delivered.

IIEC asserts that ComEd's 1997 IEDT payment represents 91.5% of ComEd's 2009 test year IEDT, and that payment was exclusively a function of the 1997 invested capital tax paid by ComEd. ComEd's 2009 IEDT of \$108.8 million is only about 8.5% above the 1997 invested capital tax that was determined exclusively by the tax on ComEd's invested capital – wholly apart from its kWh deliveries. These figures are not disputed by other parties. Under the circumstances, IIEC proclaims that it is unreasonable to continue to allocate IEDT on the empirically rebutted presumption that it is exclusively a function of kWh delivered.

*b. IIEC Recommended Allocation*

Based on the above analysis, IIEC concludes that there is no credible basis for claiming that 100% of ComEd's IEDT responsibility is related to kWh sales, when over 90% of the tax responsibility is fixed at the level of ComEd's 1997 invested capital tax, with only the remaining 8.5% affected to some small degree by kWh sales. Accordingly, IIEC recommends an allocation



approach that gives recognition to these facts and to the Commission's policy of allocations on the basis of cost causation. IIEC proposes to recognize the empirical causes of IEDT through distinct causal categories and different allocation factors in ComEd's cost of service study.

The first category of IEDT cost under IIEC's proposal is the portion of IEDT attributable to ComEd's 1997 levels of IEDT (\$99.5 million). This cost category would be allocated on the basis of plant in service, recognizing that this portion of the IEDT approximates ComEd's 1997 investment-based IEDT. The second category of IEDT cost would consist of the remaining portion of IEDT (\$9 million in the current case) which, according to IIEC, is partly a function of ComEd's kWh delivered, at least in some years. That portion of IEDT would be allocated based on kWh sales, using the allocation factors developed by ComEd in its cost of service study.

IIEC asserts that, although changes in plant levels do not affect the IEDT on a going-forward basis, over 90% of ComEd's current tax responsibilities are fixed, and they are a function of ComEd's 1997 plant investment. It makes no sense whatsoever under cost causation principles to allocate that portion of the tax on the basis of kWh deliveries in 2009, IIEC declares. IIEC indicates that there is a direct and undeniable causal connection to historical plant in service that should be recognized. That causality is recognized in IIEC's proposed allocation approach.

## **COMMISSION ANALYSIS AND CONCLUSION**

To begin, we note that we first approved an energy allocator for what is being called the IEDT in the first ComEd delivery service case, Docket No. 99-0117. At approximately the same time, we approved plant in service allocators for each of the other electric utilities (several of which are now a part of Ameren Illinois utilities). In reviewing our intervening ComEd delivery service rate case orders, in Docket Nos. 01-0423, 05-0597 and 07-0566, we find no subsequent analysis of this issue. Thus, ComEd has allocated this tax on an energy basis since 1999. But there has been an inconsistent policy on this matter among the utilities for several years. However, we also note that in 2010, we reversed course on this matter at the request of the Ameren Illinois utilities and approved an energy allocator for those utilities as well. Thus, even if we see merit to IIEC's proposal, approving IIEC's proposal in this case effectively would be a reversal of our 1999 decision for ComEd and, as pointed out by Staff, would differ from our more recent decision in Docket No. 09-0306, et. al. (cons.). Accordingly, a careful analysis of the issue, and distinctions from those cases, if any, is warranted.

In Docket No. 99-0117, the Commission established the first-ever unbundled delivery service rates for Illinois utilities, along with implementation plans for establishment of a competitive electric retail supply market. In 1999, we were faced with a very large number of decisions in a relatively short amount of time. As delivery services became familiar to customers, and to us, and as competitive market rules and practices evolved, we have revised or refined our positions on a large number of issues. For example, we have approved changes to ComEd's delivery service rate structures in virtually every delivery service rate case since 1999. Also, we have changed allocation approaches on several cost of service items, including the primary versus secondary facilities and the CP vs. NCP issues being addressed in this case. More to the point, in Docket No. 09-0306, et. al. (cons.), we reversed our long-standing position for the

Ameren Companies on the very issue of the subject tax, which we referred to as the PURA tax in that case. The upshot is that we are not bound to forever follow decisions made in 1999, for example, if compelling information is presented that warrants a change in approach. Similarly, we are not bound to follow our decision in Docket No. 09-0306, et. al. (cons.), if the circumstances or proposal is different in the case at bar.

There is an obvious, albeit superficial, appeal in rejecting IIEC's proposal and approving ComEd's proposed energy allocator, which is supported by Staff. As all parties acknowledge, the current law uses tiered per kWh rates to compute the utility's tax liability. However, calculation of the tax is not necessarily the same as cost causation for non-tax rate setting purposes. The un rebutted evidence in this case is that the tax rates in the PURA law themselves were designed to collect the same level of tax from each utility as was paid in 1997, with allowances for growth in tax collections, limited by the increase in CPI or 5%. Thus, unless the law is changed again, there is forever a link to 1997 tax levels, which were based on utility plant in service. However, it is also clear that there is a link to kWh sales, since a utility's tax obligation in any year is affected by its level of sales, especially in years when the statewide cap is not exceeded, (should that occur) or in its level of tax payments relative to other utilities, in years when the cap is exceeded (which has been the case in every year, at least through 2008, according to IIEC).

Staff argues that current changes in plant in service do not affect tax liability. While true, this is not dispositive. As IIEC has pointed out, changes in kWh sales do not necessarily affect tax liability either, particularly in years when the statewide cap is exceeded. Plus, as mentioned, there is no denying the link to 1997 plant in service in determination of the tax rates, which in turn, has a large impact on the tax liability today.

It is clear to the Commission, based on our consideration of the evidence in this case that neither an allocator based fully on plant in service, nor one based fully on kWh sales, adequately reflects cost causation for the IEDT. This is despite our prior determinations, both distant and recent, that allocators based fully on plant in service or fully on energy deliveries should be used. IIEC's position in this case, which is different from its primary position in Docket No. 09-0306, et. al. (cons.) (which we did not adopt), is the only position in the record in this case that adequately, or even somewhat, recognizes the dual causative nature of both plant in service and energy. Accordingly, we approve IIEC's approach to segregate the IEDT into two parts, the 1997 level of IEDT and the amount above the 1997 level, viz \$99.5 million and \$9 million, respectively, and to allocate the costs of the first on the basis of utility plant in service and costs of the second on the basis of energy delivered. It is clear that, with a fixed 1997 level of IEDT, the proportion that is allocated on energy will grow over time, as ComEd's total tax liability grows.

While we acknowledge that this decision differs from our recent decision in Docket No. 09-0306, et. al. (cons.), involving the Ameren Utilities, we would point out that in that docket we were deciding between Ameren's position, allocation fully on energy delivered or IIEC's proposal for allocation fully on plant in service. (Order, Docket No. 09-0306, et. al. (cons.) at 243: "AIU, Staff, and IIEC each make compelling arguments for and against allocating the PURA tax on the basis of either plant in service or kWh"). IIEC's alternative approach in that

case, which is similar its proposal in this case, was introduced in rebuttal testimony and was not as fully developed as it is in the current case.

IIEC has indicated that the necessary allocation factors are readily available in each of the cost of service studies and that implementation of its approach is straightforward. No party has disputed this claim. Accordingly, we adopt IIEC's approach for use in the approved cost of service study in this case.

#### **D. Rate Moderation**

##### **IIEC's Position**

In this case, IIEC has proposed a rate moderation plan similar to the one approved in the recent Ameren rate cases, Docket No. 09-0306, et. al. (cons.). Specifically, IIEC proposes that the increase to any delivery service rate class or subclass be limited to 150% of the overall revenue increase, inclusive of the impact of the IEDT approved for ComEd.

According to IIEC, rate moderation and avoidance of rate shock is an important principle of proper utility rate design. The Commission has recognized the importance of that principle in its recent decisions in the Docket No. 09-0306 et al. (cons.), and in the last ComEd rate case, Docket No. 07-0566. In the Docket No. 09-0306, et. al. (cons.), the Commission stated:

[M]itigation strategies serve an important role in promoting rate continuity and rate stability while considering potential bill impacts that could result as rates are moved toward the actual cost of service.

\* \* \*

It is a widely held ratemaking policy that rates should be designed to reflect cost causation, maintain gradualism, and avoid rate shock.

(Docket No. 09-0306, et. al. (cons.), Final Order, April 29, 2010 at 287, 295).

IIEC states that in our decision in the last ComEd rate case, the Commission addressed rate moderation in two ways. First, IIEC states we refused Staff's proposal for an across-the-board increase (i.e., system average increase for all customers), because it allowed no movement toward alleged cost of service, but we moderated selected class rate changes. (*Re: Commonwealth Edison Company*, Dkt. 07-0566, Order, Sept.10, 2008, Final Order at 213). IIEC says that in recognition of deficiencies in the ComEd ECOS studies, IIEC recalls that we moderated the increase to the classes that would be most adversely affected by movement to the flawed cost determination.

Therefore, we accept ComEd's ECOSS with the following modification. Above, we determined that the proper assignment of primary and secondary distribution costs would likely reduce the

total cost allocation to customers in the Extra Large Load, High Voltage, and Railroad delivery classes. It would be inconsistent with that finding to accept ComEd's two-step rate increase. Instead, an allocation that more closely reflects a proper cost of service would be reflected in a four-step, gradual movement toward rates based on the ECOSS for Extra Large Load, High Voltage, and Railroad Delivery Classes. ComEd Ex 30.0 at 43-45. Thus, the Commission authorizes a 25% movement toward ECOSS based rates for these customers, instead of a 50% movement.  
(*Id.*).

The second way the Commission recognized the need for rate moderation, according to IIEC, was in our use of percentage deviations from the system average increase as a measure of rate impact. IIEC claims that, in our discussion of the Railroad Class, the Commission essentially defines rate shock in terms of increases in multiples of the ComEd system average increase.

In this case, ComEd originally proposed rates for the railroad class that were more than five times that of the general increase. Even under its mitigation plan, the proposed rates for the railroad class are three times higher than the general increase. Thus the ECOSS, which the Commission has found to be inaccurate in several respects relevant to the railroad class, directly conflicts with our finding in Docket 05-0597 that minimizing rate shock to railroad customers is in the public interest.  
(*Id.* at 223).

IIEC states that these recent decisions show that the Commission, 1) recognizes the importance of rate moderation and avoidance of rate shock, and 2) uses percent of overall increase as an indicator of rate shock. In Docket No. 09-0306, et. al. (cons.), the Commission limited the increase for any class to 150% of (1.5 times) the utility average increase, as proposed by Staff and IIEC, including the impact of the Public Utilities Revenue Act (PURA) tax (referred to as IEDT in this case). IIEC points out that we also agreed with IIEC's specific recommendation to apply rate moderation at the subclass level, since customer impacts are more related to subclass changes more than to full rate class changes.

IIEC recommends that rate moderation be implemented at the subclass level. Given the concern over the impact of the change in the PURA tax allocation, the Commission is inclined to agree. Moreover, IIEC has expressed its willingness to accept Staff's rate mitigation approach if it is applied at the subclass level. The Commission sees no reason why Staff's proposal based on a 150% increase limit could not be applied at the subclass level, as suggested by IIEC.  
(2009 Ameren Cases, Final Order, April 29, 2010 at 295).

In addition, applying rate moderation at the subclass level provides relief where needed, and only where needed, says IIEC.

In the current case, IIEC claims that it is the only party that has addressed rate moderation in a manner consistent with the Commission's recent determinations. According to IIEC, ComEd only proposed gradual movement toward cost of service, without regard to the specific bill impact. Staff, on the other hand, ignores altogether the issue of rate moderation in this case, despite its proposal for (and Commission approval of) rate moderation in Docket No. 09-0306, et. al. (cons.). Staff's focus appeared to IIEC to be exclusively on movement toward cost of service, without regard to rate moderation or avoidance of rate shock for any class.

IIEC states that its witness Stephens took account of the Commission's policies and referencing the ELL, High Voltage ("HV") and Railroad delivery classes, pointed out that it is important that protections be put in place to ensure that undue rate impacts are avoided with respect to all rate classes, not just three. Accordingly, and consistent with the Commission's recent decision involving the Ameren Illinois Utilities, Docket No. 09-0306, et. al. (cons.), he recommended that the Commission approve a rate moderation plan whereby no customer class or sub-class experiences an increase in delivery charges of more than 150% of the overall ComEd revenue increase, inclusive of the impact of the Illinois Electricity Distribution Tax. For example, should the Commission approve a 20% increase in ComEd's delivery revenues in this case, no class or sub-class should receive an increase greater than 30% (20% x 1.50).

IIEC states that our four-step movement toward cost of service for the ELL, HV and Railroad classes, discussed in Section VIII.C.4.a. below, alone is insufficient protection against rate shock. Further, it applies only to three ComEd rate classes. IIEC proposes that the Commission should recognize the importance of the policy of rate moderation, without regard to which customer classes may need the protection, as we did in Docket No. 09-0306, et. al. (cons.). Customer classes that experience unduly large delivery service increases, i.e. more than 150% of the overall ComEd increase, should receive protection, regardless of the identity of the particular rate class. IIEC claims, however, that ComEd, like some other parties, ignores the overarching principle of rate moderation, and focuses exclusively on movement toward cost based rates as though less than full movement to cost guarantees avoidance of rate shock. Indeed, ComEd essentially equates avoiding rate shock with only moving partially toward cost, despite the Commission's two most recent rate decisions that have not accepted that equivalency, according to IIEC.

IIEC posits that rate moderation is best applied at the highest level, without foreknowledge of which customer classes may be affected. Because the rate impacts depend on many Commission determinations related to revenue requirements, cost of service, and rate design, it is impossible to know now which rate classes and subclasses may require rate moderation. IIEC claims that it is possible that Commission decisions in these areas make application of this rate moderation protection minimal or moot. However, the Commission should approve this improved rate moderation to provide certainty of protection, should a combination of Commission decisions have large impacts on any particular rate class or subclass, according to IIEC.

IIEC asserts that implementation of its rate moderation plan will be relatively straightforward, as it was Docket No. 09-0306, et. al. (cons.). Mr. Stephens explained the approach for determining the applicability to classes and subclasses, once the decisions about revenue allocations are known, and the necessary spreading of cost recovery among customer classes, if needed. IIEC goes on to state that, consistent with its orders in Docket No. 09-0306, et. al. (cons.) and the ComEd rate case in Docket 07-0566, the Commission should recognize the need for rate moderation and avoidance of rate shock, and should approve the rate moderation plan proposed by IIEC in this case, as outlined above and in the testimony of IIEC witness Stephens.

## **COMMISSION ANALYSIS AND CONCLUSION**

The Commission is acutely aware of the need to moderate rate impacts and to promote gradualism and to avoid rate shock. We most recently acknowledged this in the recent Ameren rate cases, Docket No. 09-0306, et. al. (cons.), but also regularly acknowledge it in ComEd and other rate cases. While we are not bound to a specific rate moderation approach, we see no reason to deviate from the protections we recently approved in the Ameren cases, Docket No. 09-0306, et. al. (cons.). Specifically, and consistent with IIEC's position in this case, we find that the increase to any delivery service rate class or subclass revenues should be limited to 150% of ComEd's overall revenue increase, inclusive of the impact of the IEDT approved. As IIEC points out, this protection ultimately may not affect any class' or subclass' charges. This would be a positive result, meaning our other decisions about revenue requirement, cost of service, rate design etc. are not leading to rate shock. However, if they should, it is important to maintain this overarching protection, which allows rates of classes that are below cost to move closer to cost of service, while protecting all classes against rate shock. Thus, unlike in Docket No. 07-0566, where we rejected an across the board increase because it interfered greatly with movement toward cost, we do not find that our Ameren approach, as proposed by IIEC here, to constrain movement to the same degree.

## **VIII. RATE DESIGN**

### **B. Potentially Uncontested Issues**

#### **1. High Voltage Rate Design Simplification**

### **IIEC's Position**

IIEC has reviewed ComEd's proposed changes to simplify the rate design for the HV delivery service rate class by reducing the number of charges applicable to this rate class. According to IIEC, ComEd proposes to reduce the current list of six possible customer charges and six possible standard metering service charges to a single customer charge and a single metering charge and to reduce the list of possible DFC charges for HV customers from five to three.

IIEC has no objection to ComEd's proposed rate design changes.

## COMMISSION ANALYSIS AND CONCLUSION

In the absence of objection to ComEd's proposal, we find it reasonable and appropriate.

### **C. Potentially Contested Issues**

#### **3. Class Definitions**

##### **b. New Primary Voltage Delivery Class vs. Primary Subclass Charges**

### **IIEC's Position**

IIEC begins by characterizing our analysis in Docket No. 08-0532, indicating that we recognized the value in distinguishing the costs imposed by primary customers – customers who receive service at 4,000 volts (“4 kV”) and above -- from those imposed by secondary customers, who receive service at below 4 kV. IIEC offers the following quotation from our rate design investigation order in Docket 08-0532.

Our concern [in Docket 07-0566] was that although the vast majority of ComEd's customers take service at lower voltages that utilize its extensive distribution system, a small number of customers take service at higher voltages that bypass significant portions of the distribution infrastructure. Their cost of service is therefore lower on a per kilowatt basis. The rates charged to these primary system customers should reflect this lower cost of service.

\* \* \* \*

Consistent with the foregoing, we direct ComEd to develop and provide in its next rate proceeding: ... 5) consideration of redefining rate classes on the basis of voltage or equipment usage to better reflect the cost of service. (RDIO at 35, 40).

Ultimately, according to IIEC, our Findings and Ordering Paragraphs in the RDIO gave ComEd very clear direction as to what was required in this rate case. IIEC cites to the following findings we made in the rate design investigation order in ICC Docket 08-0532.

The Commission, having considered the entire record herein and being fully advised in the premises, is of the opinion and finds that:

....,

(4) the following decisions are final and should be reflected in the ECOSS for consideration in any subsequent action in the Company's next rate case:

- a) customers receiving power at 4kV or higher are primary system customers who should be identified. Rates charged to these customers should be adjusted to reflect that they do not use the secondary distribution system;
- b) customers receiving power at levels below 4kV should be considered secondary system customers and charged accordingly; (RDIO at 84) (emphasis added).

IIEC avers that a rate design that does not differentiate between primary and secondary customers' costs does not comply with the Commission's RDIO directives, and that ComEd's proposed rate design does not make such a differentiation. IIEC submits that this failing must disqualify ComEd's proposed rate design (Alongi, ComEd. Ex. 73.1) and the associated Proposed ECOS Study (Heintz, ComEd Ex. 75.1) from adoption in this case.

IIEC states that, besides its rate design, this leaves ComEd's Preferred Exemplar (ComEd Ex. 73.2) and its Alternative Exemplar (ComEd. Ex. 73.3) rate designs. IIEC states that we must determine whether (a) to adopt a new rate class composed of primary customers from each of ComEd's traditional, size-differentiated delivery classes (leaving only secondary customers in the existing classes) or (b) to create sub-classes within the existing classes to distinguish primary and secondary customers, with distinct DFCs for primary and secondary customers. These choices are represented respectively by (a) ComEd's Preferred Exemplar rate design and (b) IIEC's rate design and ComEd's Alternative Exemplar rate design. As noted in Section VII.C.1.(iii) above, ComEd favors a new primary class (PVD) over IIEC's less disruptive creation of distinctive DFCs within the existing ML, LL, VLL and ELL rate classes, according to IIEC. ComEd's "Alternative Exemplar" approach (Alongi, ComEd Ex. 73.3) is similar to IIEC's approach, except that ComEd's approach would establish separate DFCs for the Small Load delivery class and separate transformer charges for transformation between two primary voltages. IIEC notes that here currently are no separate transformer charges. The cost of transformers is collected through the DFC. IIEC claims that approach would not change under IIEC's recommended rate structure. ComEd's Preferred Exemplar and Alternative Exemplar rate structure, however, would separate transformer costs and charge them separately.

IIEC indicates that under its proposal, only DFCs would be affected and any change in ComEd's approved revenue requirement would be reflected in the DFCs. IIEC claims its proposal is a simpler and better approach to implementation of the Commission's directive to present voltage differentiated rates, as it is less disruptive to customers. Specifically, no new classes are needed, customers remain in their existing classes, and only the DFCs paid by customers would change. All of the customers in a particular rate class would pay the same customer charge, meter charge and IEDT charge (if applicable). Only the DFC for these customers would differ, depending on whether they were in the primary subclass or the secondary subclass.



IIEC indicates that, in contrast, ComEd's Preferred Exemplar rate design, with its novel PVD class, requires creation of a new customer class and redefinition of five existing customer classes. The new primary class improperly groups customers of different sizes and usage characteristics, which is counter to traditional rate design. IIEC agrees with ICC Staff that this proposed "one-size-fits-all" approach is also inconsistent with ComEd's approach for customers served at secondary voltage and customers served at high voltage. Because Staff does not specifically address IIEC's nearly identical rate structure, IIEC infers that Staff would not object to IIEC's rate structure in the alternative.

IIEC asserts that, to the extent that the facilities used to provide service to customers taking service at primary are likely comparable among customer classes, as claimed by ComEd, the same would be true for secondary customers. Yet, ComEd has maintained, since its initial delivery service rate case, that size differentiation must be maintained to recognize the different usage patterns and (presumably) cost of service characteristics of different size customers. IIEC concludes that, thus, ComEd's exemplar PVD class in its Preferred Exemplar rate proposal would result in inconsistent treatment of customers in this regard and recommends that ComEd's approved rate design should continue to recognize both the size and cost differences among customers in the existing non-residential rate classes. IIEC notes that its proposed rate design accomplishes those objectives by retaining the existing size-differentiated customer classes and establishing separate, cost-distinguished DFCs for primary and secondary customers within the ML, LL, VLL and ELL rate classes.

IIEC recommends that, if the Commission does not approve IIEC's recommended rate structure, under no circumstances should it approve ComEd's proposed rate structure. Instead, IIEC suggests that a less cost driven (but acceptable) alternative would be to use ComEd's Alternative Exemplar rate design, illustrated in ComEd Ex. 73.3, with the associated rates themselves modified to reflect IIEC's rebuttal ECOS Study. As previously mentioned, under no circumstances does IIEC recommend the Commission adopt ComEd's Proposed rate design structure, which does not comply in IIEC's view, with the Commission's RDIO directive to recognize voltage differences. Similarly, IIEC states that the Commission should not adopt ComEd's PVD class structure (Preferred Exemplar), as it places primary customers with significantly different costs of service in one rate class, and it introduces unnecessary complications.

## **COMMISSION ANALYSIS AND CONCLUSION**

As we indicated in Docket No. 08-0532, customers receiving power at 4kV or higher are primary system customers who should be identified, and rates charged to these customers should be adjusted to reflect that they do not use the secondary distribution system. Similarly, customers receiving power at levels below 4kV should be considered secondary system customers and charged accordingly. Despite our direction in Docket No. 08-08532, ComEd proposed a rate structure that does not provide for charges that recognize these cost differences. Nor did ComEd provide any compelling evidence or argument that our decision on this matter in Docket No. 08-0532 should be reversed. Accordingly, ComEd's Proposed rate structure, as presented in ComEd Ex. 73.1 must be rejected.

Of the remaining rate structures, we must choose from among 1) ComEd's Preferred Exemplar, which establishes an entirely new class of customers of diverse size; 2) ComEd's Alternative Exemplar, which maintains existing class definitions but introduces transformer charges, where such costs had been previously collected through the DFCs, and establishes separate DFCs within the various classes, Small Load through Extra Large Load; or 3) IIEC's approach, which, like ComEd's Alternative Exemplar structure, establishes primary and secondary voltage DFCs within existing classes, Medium Load through Extra Large Load, but does not introduce a new transformer charge. Since technically each of these approaches would comply with our finding in Docket No. 08-0532, for voltage differentiated rates, we must consider which approach would be the most equitable in this case. We agree with Staff and IIEC that creation of a new PVD class creates an unnecessary complication and, through its "one size fits all" nature ignores legitimate class differences and cost differences. Thus, we reject ComEd's Preferred Exemplar design.

Of the remaining two rate designs, we favor IIEC's approach as slightly less disruptive than ComEd's Alternative Exemplar approach, since no new charges are created and because it does not establish separate DFCs in the Small Load class, where only a very minute fraction of customers receive service at primary voltage. Accordingly, we direct ComEd to implement a rate class structure where separate DFCs are charged in the Medium Load through Extra Large Load delivery classes, reflecting whether customers receive service at 4 kV and above (primary voltage) or below 4 kV (secondary voltage), consistent with IIEC's proposal in this case.

#### **4 Non-Residential**

##### **a. Movement Toward ECOSS Rates**

##### **(i) Extra Large Load & High Voltage Customers**

#### **IIEC's Position**

IIEC points out that the order in Docket No. 07-0566 established a four-step process to move the ELL, HV and Railroad delivery classes' rates toward cost of service, and claims that this was primarily due to our doubts about the validity of ComEd's cost of service study in that case. Because the Commission recognized the likelihood that ComEd's proposed cost of service for these classes was overstated, it was unwilling to move more rapidly toward the wrong end point, according to IIEC, citing *Commonwealth Edison Company*, Docket No. 07-0566, Sept. 10, 2008 Final Order at 213.

IIEC states that ComEd proposed to continue the four-step movement toward cost based rates for certain classes, as directed by the Commission in Docket No. 07-0566. Specifically, ComEd proposed to move the ELL class and the HV classes toward cost of service (as measured by its ECOS studies) by adjusting the DFCs for those rate classes. Rates for those classes would move upward by 33%, as the second step in the Commission's four-step process. IIEC supports the continuation of the four-step movement toward cost.

Staff's testimony and briefs in this case are enigmatic, according to IIEC. IIEC opines that Staff appears to recognize that the order in Docket 07-0566 established a four-step process

to move the ELL, HV and Railroad delivery classes' rates toward cost of service, which dictates 33% movement the rest of the way to cost, quoting from page 135 of Staff's initial brief:

Specifically, in Docket No. 07-0566, the Commission approved a four-step increase in the DFC to cost. With three steps remaining, the second step proposed by ComEd in this case would increase the DFC by 33% toward a cost-based level for the Extra Large Load and High Voltage classes.

Despite this, Staff proposes to deviate from the Commission's process by moving rates additional increments toward cost of service – above the 33% that is mathematically the first of three remaining steps in the Commission's four-step process, according to IIEC. As IIEC understands Mr. Boggs' proposal, he would begin with ComEd's proposed rates, which already reflect 33% movement toward alleged cost (at full revenue request) for the ELL and HV classes and 10% movement toward cost for the Railroad class, and would then move the ELL and HV revenues an additional 33% toward alleged cost and move the Railroad revenues an additional 25% toward alleged cost. Thus, for the ELL and HV classes, Mr. Boggs would essentially be taking the second and third steps of the Commission's four-step process at once, in IIEC's estimation. IIEC claims that Mr. Boggs would thereby turn the Commission's previously approved four-step process into a three-step process for the ELL and HV classes and some indeterminable number of steps for the Railroad classes. Further, IIEC claims that since Mr. Boggs' rates are fixed, and based on ComEd's unadjusted revenue request, if they were to be adopted, Mr. Boggs' rates would actually result in even more deviation than just combining the second and third steps.

IIEC proposes that the existing four-step process should be continued, moving the rates of the ELL and HV classes 33% of the way from current revenues to cost of service, as measured by IIEC's rebuttal ECOS Study. IIEC states that this approach does not necessarily advantage the ELL and HV classes or subclasses. IIEC posits that, depending on the Commission's determinations on customer class structure, primary versus secondary facilities split issues, and allocations of various cost of service items such as primary lines and substations and the IEDT, one or more of the subclasses may be entitled to a larger rate decrease under movement to cost of service. Despite this potential, IIEC does not disagree with maintenance of the Commission's four-step process.

## COMMISSION ANALYSIS AND CONCLUSION

In Docket No. 07-0566, we established a four-step process as relates to movement toward cost of for the Extra Large Load and High Voltage rate classes. Considering the rates resulting from that case, along with a 33% movement in this case, as recommended by most of the parties, at least half of the perceived rate inequity, which built up over many years, will be removed in a relatively short time period. We are not persuaded by Staff that our four step process established in Docket No. 07-0566 is deficient or should not be maintained. Nor are we persuaded that circumstances have changed in any that would dictate abandonment of our process. Accordingly, we adopt ComEd's proposal to move rates 33% of the way to cost of service in this case, subject to the rate moderation protections adopted herein.

**(iii) Spreading of Revenue Shortfall Due to Limited Movement to Cost-Based Rates or Rate Moderation**

**IIEC's Position**

IIEC claims that any time a delivery class' rates produce revenues at a level different from its cost of service, that class is creating either a revenue surplus or shortfall and, to the extent the surplus or shortfall is spread among classes, that affects other customer classes. This is a common byproduct of rate design mechanisms that address rate moderation or avoidance of rate shock. In the last ComEd rate case, the Commission recognized the potential for rate inequity to be created, but acknowledged that determining the existence of a rate inequity is fully dependent on knowing the classes' actual cost of service, determined through a valid cost of service study, according to IIEC, quoting from 213 of our order in Docket No. 07-0566.

IIEC opines that in this case, there are two primary cost allocation and rate design objectives that could require spreading of revenue shortfalls among classes. First is the aforementioned Commission-designed limitation on movement toward cost of service for the ELL, HV and Railroad classes. When and if the Commission identifies a correct cost of service study in this case, it will be possible to determine how the existing revenues from the ELL, HV and Railroad classes compare to cost and thus, determine the extent to which the Commission's four-step movement toward cost of service for these classes will require a revenue shortfall to be spread to other classes. Second is rate moderation, a principle applicable to all customer classes, designed to protect against rate shock. IIEC claims that once the Commission has decided various issues related to revenue requirements, rate class structures, cost allocation, and rate design, it may be necessary to moderate rates. If this occurs, it will be necessary to spread revenue requirement shortfalls to other classes that would not experience rate shock.

IIEC's position is that if spreading of revenue shortfalls is necessary, the Commission should direct that they be spread to other classes on a *pro rata* basis, based on total class revenues. To the extent that the redistribution of revenue requirement to a class would cause it to exceed the maximum moderated revenue increase, such amounts should be spread to remaining classes that have not been maxed out.

IIEC did not express a position on how widely, *i.e.*, to which classes, to spread the collection of revenue shortfall.

**COMMISSION ANALYSIS AND CONCLUSION**

As IIEC has pointed out, it is common that when a delivery class' rates produce revenues do not match cost of service, the surplus or shortfall is spread among other classes. To the extent that occurs in this case, due to impacts of limited movement cost of service or rate moderation, it is appropriate to make up the difference from other customer classes, being careful to avoid creating rate shock to other classes. We agree with IIEC that shortfalls should be spread on a *pro rata* basis, on the basis of class revenues.

## **5. Collection of Illinois Electricity Distribution Tax**

### **IIEC's Position**

According to IIEC, ComEd reasons that the IEDT is imposed upon ComEd on the basis of kWh delivered and, therefore, is better collected through a separate per kWh charge on each customer's bill than in existing delivery charges. IIEC disagrees with ComEd's factual premise and with its proposed rate design change.

IIEC states that ComEd currently collects the IEDT in base rates through applicable delivery service charges for each customer class and that ComEd has not demonstrated why this particular element, of all the similar elements of its overall cost of service, must be identified separately and recovered through a separate per kWh charge on each customer's bill.

IIEC highlights that the tax in question is imposed directly on ComEd, not on its customers. In this regard, the IEDT is similar to sales taxes, income taxes, property taxes and other taxes imposed on ComEd, according to IIEC, and are reflected in ComEd's overall cost of service and collected along with all of ComEd's other prudent and reasonable costs, in its existing delivery service charges. Absent some legitimate reason for culling this particular cost from the herd of ComEd costs now collected in ComEd's existing rates, the IEDT cost should continue to be collected in ComEd's existing rates, through its existing delivery service charges. IIEC asserts that ComEd has yet to identify any reason that justifies changing this element of rate design, relying on ComEd witness Alongi's "understanding" that the IEDT is imposed on ComEd on the basis of kWh delivered. Unfortunately, that "understanding" is actually a misunderstanding of the IEDT, its history, and the factors that actually determine the amount of tax paid by ComEd each year, avers IIEC.

IIEC claims that it has demonstrated that the tax is not exclusively, or primarily, a function of kWh delivered by ComEd in any given year, as Mr. Alongi assumed, in its discussion of the allocation of the IEDT. Therefore, according to IIEC, ComEd's proposed rate design change has no basis in the evidence of record and should be rejected. The IEDT should continue to be collected in base rates through existing delivery service rate charges for each delivery service rate class -- the way ComEd collects its other prudent and reasonable operating costs.

In response to ComEd's argument that its proposal should be approved for the same reasons articulated in the recent Ameren cases, IIEC claims that the Commission Order in the Ameren case was apparently based in large part on an assumption that the legislature intended to affect the allocation and collection of the tax for electric ratemaking purposes. IIEC claims it has refuted that assumption.

### **COMMISSION ANALYSIS AND CONCLUSION**

We agree with IIEC that ComEd has provided no compelling reason to change the collection mechanism for this ComEd expense element. As pointed out previously, ComEd has allocated the IEDT cost to classes using an energy allocator since 1999, but has recovered this

cost, like MOST of its other expenses, through its existing DFC charges. We see no reason to change that process at this time.

This conclusion is especially true considering the change in allocation method adopted in this proceeding, whereby, much of the IEDT cost will be allocated to customer classes on the basis of plant in service, rather than kWh. Costs related to plant in service are collected from customers through the DFCs. Accordingly, a much smaller portion of cost will be allocated to customer classes on the basis of energy delivered. This makes the proposal of a change to a separate energy-based charge even less logical at this time.

## **6. Distribution Loss Factors**

### **IIEC's Position**

IIEC recounts that ComEd originally presented a distribution loss study in this case that produced questionable results in relation to the HV Class. The Department of Energy ("DOE") presented testimony in this case that suggested that ComEd's proposed distribution loss factor for the HV delivery service class (1.93%) significantly overstated the actual distribution losses for that class. Specifically, DOE presented evidence demonstrating that distribution losses for customers served at 138,000 volts ("138 kV") or higher, are effectively zero. In addition, DOE witnesses pointed out a number of issues relating to the reasonableness of the documentation supporting the development of key inputs used to calculate the proposed distribution loss factors for HV customers. Specifically, ComEd was not able to document the transformer losses used to derive load-related and no-load transformers losses applicable to the HV delivery class. IIEC witness Stephens agreed with DOE witnesses Etheridge and Patterson.

IIEC states that, in rebuttal testimony, ComEd took steps to address these concerns. On rebuttal, ComEd proposed to recognize that customers served at 138 kV or higher voltages caused essentially zero distribution losses, by providing updated distribution loss factors applicable to customers with service points at which electricity is metered at 138 kV or higher. Specifically, ComEd will determine and apply weighted average distribution loss factors for all points of delivery for the 18 HV accounts with one or more points of delivery metered at 138 kV or higher. ComEd also revised its distribution loss study to correct the estimates of load related and no-load losses associated with transformers used to supply electricity to customers in the HV class. This last change lowered ComEd's 2009 distribution loss study factor for customers in the HV class metered at 138 kV or higher, from 1.93% to approximately 0.9%.

IIEC witness Stephens also pointed out that in estimating the transformer losses, ComEd used a simple average of the "no load" and "full load" loss percentages for those transformers, where such percentages were known. However, the MVA capacity of the subject transformers varies considerably. Under such circumstances, the simple average of no load and full load loss percentages puts the same weight on loss percentages associated with small MVA transformers as it does on the loss percentages for the large MVA transformers, even though larger transformers have a greater impact on ComEd's actual distribution losses. Use of a simple average skewed the results of ComEd's analysis. Therefore, IIEC recommended the average of

no load and full load loss percentages for the subject transformers be calculated as an MVA-weighted average.

IIEC indicates that, in its surrebuttal testimony, ComEd accepted Mr. Stephens' recommendation and calculated its distribution loss factors using the MVA-weighted full load and no load loss percentages. IIEC agrees with ComEd's adjustment and the resulting distribution loss factors for HV customers and concludes that ComEd has adequately addressed IIEC's concerns about the distribution loss factors for High Voltage customers.

### **COMMISSION ANALYSIS AND CONCLUSION**

It appears that ComEd, DOE and IIEC are all in agreement on this issue, We find the agreed approach acceptable.

DATED this 28<sup>th</sup> day of February, 2011.

Respectfully submitted,

ILLINOIS INDUSTRIAL ENERGY CONSUMERS

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